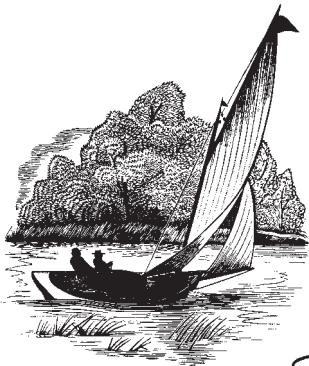


Special Features This Issue

Facing Down the Bear – Ice Yachting 100 Years Ago
Setting Up a Small Boat for Camp Cruising
A Conversation with Will Weidner
Isaiah and Stephen Build a Canoe – More Simple Foam Boats
Where Have All the Boaters Gone?



messing about in **BOATS**

Volume 32 – Number 11

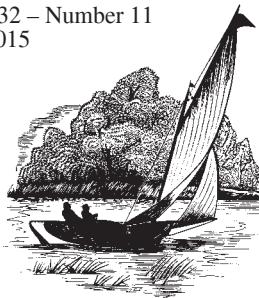
March 2015



messing about in **BOATS**

29 BURLEY ST., WENHAM, MA 01984 (978) 774-0906

Volume 32 – Number 11
March 2015



US subscription price is \$32 for one year. Canadian / overseas subscription prices are available upon request

Address is 29 Burley St
Wenham, MA 01984-1043
Telephone is 978-774-0906

There is no machine

Editor and Publisher: Bob Hicks
Magazine production: Roberta Freeman
For subscription or circulation inquiries
or problems, contact:

Jane Hicks at
maib.office@gmail.com

In This Issue...

- 2 Commentary
- 3 From the Journals of Constant Waterman
- 4 You write to us about...
- 7 Book Reviews
- 10 Remembering the Canals: Part 3
- 11 Buffalo Maritime Center TSCA Gathering
- 12 Facing Down the Bear
- 14 25 Years Ago in MAIB: Ice Yachting
100 Years Ago
- 21 Setting Up a Small Boat for Camp
Cruising
- 23 Outrigger Junior
- 24 Beyond the Horizon
- 26 Birdwatcher Covers
- 27 A Conversation with Will Weidner
- 33 *Strumpet*
- 38 Isaiah and Stephen Build a Canoe
- 40 20 Mile Boat Build (Continued)
- 41 Mathews Maritime Museum
- 42 More Simple Foam Boats
- 44 Phil Bolger & Friends on Design:
Heavy Lifting of Sharp Edged, Fragile,
Expensive Mechanical Contraptions,
Smaller and Bigger Outboards
- 46 Welcome to the John Gardner Chapter
of the Traditional Small Craft
Association
- 47 DCA: Wayfarer *Hafren*
- 50 Where Have All the Boaters Gone?
- 52 From the Lee Rail
- 53 Trade Directory
- 58 Classified Marketplace
- 59 Shiver Me Timbers



Commentary...

Bob Hicks, Editor

It's been a while since we've published anything on steam boating, so when the most recent issues of *Smokesstack* arrived this winter with a two part series on the designing of the steam launch *Equinox*, I asked for permission to reprint the series in its entirety as it was a bit out of the usual line of steam boating tales. You can enjoy it starting on page 27 if you like lotsa graphs and drawings about designing a displacement hull to go fast with 4hp.

Articles on designing and building hulls for steamboats do not turn up often. Since first being introduced to this niche group of small boat guys at the Lees Mills meet in September 1985 (six page cover story in the October 15 issue), I got the impression that this way to mess about in boats was more about the engines than the boats. The boats made wonderful platforms in which to put the engines to work, and the skippers seemed to spend most of their time with the care and feeding of that silently clicking little machine sitting amidships in whatever hull that had come to hand.

The allure of steam power still exists, no longer for commercial purposes, but just for fun. I have always felt tugged in its direction when exposed to steam power in action. When I started commuting into Boston to college in 1947 the local commuter rail, the Boston & Maine (who remembers the radio singing commercial, "Timetable Mabel, the Girl Who's in Love with a Train?") still was running the 1890s era 4-4-2 Atlantic steam locomotive. It was always a thrill to stand at trackside when that great black monster came thundering into the station in a cloud of steam, smoke and cinders. By 1950 the Atlantics were gone, replaced by Diesels, which while impressively powerful, just did not have that prehistoric appeal.

External combustion engines with all their working parts right out there to be observed in action are such fascinating machines. Their simplicity is not apparent, with all the pipes and valves and boiler gauges and fireboxes they appear to require constant monitoring and adjusting when finally underway. In most of the smaller "launches" they sit right there out in the open amidships with the passengers arranged around them trying to keep their feet out of

the constant spray and splash of the very wet mechanism. Enjoying the passing scenery at a sedate 4mph can be distracted by watching the skipper tend his power plant.

There are larger steamboats at play, of course. One on which we enjoyed an outing on Cape Cod was about 36' or so and had a full cabin with an "engine room" below decks complete with the "engineer." The owner/skipper was up forward up a set of stairs in the "pilot house" from where he signaled his engineer with an engine room telegraph. It was win/win for both, the skipper helming his craft, the engineer, a retired steamship engineer, at ease down below tending his beloved engine.

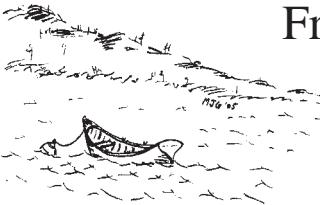
There are also steamboat guys who do build their own boats as well as engines. An example that still stands out in my memory was the *Tryall*, built by Rolly Evans, who at the time we referred to as "our steamboat guy." When we first met in 1985 Rolly was steaming in a 26' wooden launch he'd built himself, powered by a steam engine he'd built himself. In 1986 Rolly welded up in his backyard a 36' aluminum cabin hull that he named the *Tryall* after a steamboat that plied Narragansett Bay back at the turn of the century. It appeared in a series we ran, "Adventures Down the Bay," about two local youths who spent a summer week sailing their skiff around the Bay. In 1991 Rolly steamed *Tryall* up the Hudson River from Tarrytown, New York, out the Erie Canal and down the Oswego River to the big International Steamboat Flotilla at Oswego, New York.

Our current steamboat story involves some history of early post Civil War steam torpedo boats that leads to *Equinox*'s owner/designer/builder's description of not only building his hull but designing it on a drawing board using graph paper to determine various hydrodynamic calculations involved to drive a 28' hull at a loafing speed of 5-7mph with 1.5hp and go for it up to 10mph using the full 4hp of his steam engine. No CAD input here, just his brain using a few simple drafting procedures. Nice and simple, just like the steam engine.

You can learn more about all this if interested from the North American Steamboat Association, Timothy Lynch, 165 Jacks Hill Rd, Oxford, CT 06478, (203) 463-8288, smokesstackmag@yahoo.com

On the Cover...

That's the steam launch *Equinox* getting underway, she is the subject of a lengthy feature story in this issue starting on page 27, courtesy of *Smokesstack* magazine. You'll find it a bit different from our occasional steamboat articles of bygone times.



From the Journals of Constant Waterman

By Matthew Goldman
Constantwaterman.com

Well, we're getting a bit of sugaring weather here in southern Connecticut. You know what I mean. Nights below freezing, sunny days with temperatures high in the forties. Makes the sap in the sugar maples feel its oats so it wants to climb to the uppermost twigs for a better view of the world. All you need do is stand nearby with a sap bucket and make promises of little girls eating pancakes, and that sap will get so excited it'll jump in your bucket. For every quart of sap, you'll get an ounce of syrup. All you need do is take your truck up to the back forty and bring in a few cords of wood to keep that sap seething and steaming until it's reduced.

But I wasn't about to tell you how I filled my canoe and bathtub with maple sap while I boiled more on my wood range all day and all night until I needed to open the doors and windows to let out the steam. And how I made so much maple syrup I was able to swap a gallon to a New York book reviewer for half a dozen books of new poetry, and gave away whole gallons for Christmas presents. Or how I fed my tomcat maple milk until he could scarcely drag his sagging belly across the kitchen.

I thought today I'd tell you about the seals, and about the lovely slant of winter sunlight across the sound, and the distant purr of the lobster boats as they harvested their catch. It all began (as the spinners of tales so often quaintly put it) when I arose from my little bed Sunday morning. It was still below freezing. I built up the fire in the wood stove, and stalked about the house in my long johns, thinking about the weather report that lurked on my computer. I checked it again. High of 48°, breeze west, south-west at six to eight knots. I checked the thermometer outside the kitchen window. 26°. Warm for February, but nowhere near warm enough to tempt me to play on the water. That wind-chill factor is what does watermen in.

By eleven o'clock, it exceeded 40°. I went out to bring in wood and sniffed the air. I looked about the snow-free yard in hopes of glimpsing a crocus. I faced the sun and felt its benevolence smooth the cares from my brow. By twelve o'clock it was 45°. I vaulted into my pickup truck and trundled down to the boatyard. I peeled off my cockpit cover and tossed it down below. I unsnapped my boom cover, started my motor, hanked on a working jib. I cast off my lines and backed *MoonWind* out of her slip, turned and puttered into the channel and by all the finger piers. A couple working on their boat looked up as I passed. I imagined their saying to one another, "Where does he think he's going? It's only February!"

"I'm off to annoy the seals," I should have replied. Beyond the breakwater, beyond the mooring field, I raised my sails. I turned off my motor, trimmed my jib, and settled down, basking in the vast and voluptuous quiet. The harbor seals were busy awaiting me on Middle Clump. The tide was low, and the rocks well proud of the water. A dozen seals, as many cormorants, and numerous herring gulls were busy holding down the rocks to keep them from floating away. I wafted slowly closer, the breeze on my quarter. At a hundred yards, some of the seals abruptly abandoned ship. Others waited until I had halved that distance. At twenty yards, only one seal remained. The birds had departed. Several sleek heads bobbed nearby in the water. As I passed downwind of Middle Clump, a fragrance assailed my nostrils. Imagine wearing a respirator with an old, old fishing trawler stuck inside it. One good whiff and I started to blow on the sails. Whew! Hope I never come back as a polar bear. Eating seals is something I wouldn't fancy. But I'm sure that seals find one another attractive. At least once during the year I can picture lady seals rubbing themselves with ripened mullet to attract more gentleman seals. Personally, I'd just as soon play in the bilge of a fishing boat.

Being satisfied that our seals were healthy and nourished, I wended the numerous lobster pots buoys and zigged across the sound. A couple of lobster boats hauled their traps. The breeze consented to keep me moving at two to three knots. The descending sun spread its richness across the stippled water. In the distance, the pointillistic ferry to Orient Point departed the Thames and flowed across the flood tide to Sag Harbor.

At four o'clock, I motored *MoonWind* gently into her slip and made her fast. Then I dashed home and wrote about the mermaids sunning themselves on Middle Clump.



Family Owned
& Operated
since 1953

Glen-L Marine Designs 60 + Years Serving Boatbuilders Worldwide

- 300 Exceptional Boat Designs
- Row/Power/Sail 5-ft. to 55-ft.
- NEW! SUP & Surfboard Kits ←
- Epoxy & Boatbuilding Supplies
- Underwater & Deck Hardware

Full-sized patterns & detailed phase-by-phase instructions enable anyone to build their dream boat!

SPECIAL OFFER

- 288-page Book of Boat Designs
 - Free Dinghy Plans
 - Free Shipping
 - Free Supplies Brochure
 - \$9.95 Coupon off first order

Send just \$9.95 to address below



"Not in my wildest dreams could I imagine this when I started the boat"
—Bob



I will NEVER build another boat unless it's a Glen-L design." —Kevin



"Your plans for the Amigo are remarkable. Very complete & accurate."
—Mark



Glen-L Marine • 9152 Rosecrans Avenue/MA •
Bellflower, CA 90706 • 888-700-5007
Online Catalog: www.Glen-L.com/MA



You write to us about...

Activities & Events...

1,000 Small Boats in the Arctic Ocean

Toy boat building became an important program at our Center for Wooden Boats here in Seattle. It began when the CWB Board had a briefing after our first Lake Union Wooden Boat Festival in 1977. Colleen, my wife, said we didn't have enough hands on activities for the kids. She said we should look around at all the cutoffs that adults leave.

And so it began. If we had Toy Boats copyrighted, Colleen would be a millionaire. She hit on the opportunity to let even five year olds use saw, hammer, drill and scissors with nary a bandaid needed. By now there are probably more than a million of those cute little sailboats displayed on fireplace mantels.

Recently CWB was contacted by a federally funded research program on currents in the Arctic Ocean. The school children of Seattle are now making 1,000 small toy boats with colorful sails. They will be launched in the Arctic Ocean and tracked as they wash ashore.

Think of that, a kids and science program. Top that MIT!

Dick Wagner, Founder, Center for Wooden Boats, Seattle, WA

Adventures & Experiences...

Always Like to Have Shipmates Along

Some years back, my little brother died from the effects of a ten year hard go with Parkinson's. I "did" his funeral service in the church where he had been the local farm-town preacher. And afterward I sort of split for a while. I was on the road from SOCAL at the time with *Lady Bug* in tow (one of my Route 66 trips) and decided to go visit some of the places we used to go when growing up. After sitting on the same exact bench our scout troop had sat on during the summer camp campfire ceremonies some 50 years before (right here, where we now live, at Diamond Lake, as it turns out), I headed for the wilds of northern Idaho. Of course, I was sobbing and sniveling and outright bawling most of the time. But it was OK because it was just the "two of us."

I had been sailing around Priest Lake for a couple of days and hadn't talked to a living soul, just anchoring out and moving on in the morning. It was a hot July day and flat calm. I had this little two stroke, direct drive OMC 4 horse that was almost as old as I am now at that time. That poor thing had been running at full tilt for hours. I was recalling the time when I was about 15 and Lee about 12. We had gotten permission to transit the entire 20 mile length of Priest Lake in my 12' plywood ski boat, with then ancient 20 horse Merc. It was a calm day like the one I'm telling you about. The run was pretty uneventful, but a

glorious adventure for a kid who wanted nothing more than to one day sail "where no land showed above the horizon."

Quite suddenly the motor quit and absolutely refused to make another pop. After we were a while paddling with a water ski and a stick, some nice guy came along and gave us a tow the last five miles or so. So there I was about 50 years later. I'm talking it over with my brother and say, "Isn't this about the place where we got shipwrecked????"

And ya know what? Yep. That little kicker just plain quit. Wouldn't even pop. Flat calm. Hot. So I say, "Well, what're we gonna do now?" It's greasy calm for miles in every direction. Motor just won't respond to any of my attempts to get fuel and spark together for internal combustion.

Then, I kid you not, a little breeze sprang up around *Lady Bug* and I sailed on into the same marina we had been towed to, back before Kennedy went to Dallas. I got close to the pier, the wind quit just as suddenly as it started. And without really thinking about it, I gave the motor a yank. Yep. Started right up. I always try to have shipmates along on my solo trips. Somebody to talk with and to help out now and then.

Dan Rogers, Newport, WA

Phil Was a Hero to Me

Coming in to work this morning I found on my desk last October's *MAIB* with the articles about Phil Thiel's passing. I had missed it in the midst of the hubbub at work last fall.

As a pedal boat enthusiast, Phil was a hero to me. It was an article of his on building canal house pedal boats in France back in the '80s that first got my interest started. Then, when I did get into the pedal boat business in the mid '90s (purchasing molds and licensing from Hoyt-Harken for the Mallard which we renamed Escapade) I contacted Phil about the difficulty we were having designing a manufacturable pedal drive system.

Phil proposed we consider a drive on the lines of the one he had designed for his Dorycycle. Tom Parker (who eventually designed our Encore and Sprite pedal boats) and I initially tunnel vision rejected this concept because it was driven by a common V belt, and we thought it would slip too easily (I had boyhood memories of the V belt drive on my Whizzer motorbike perpetually slipping).

When we brought up the slipping probability to Phil his response was, "So what? It won't matter that much on a pedal boat." We couldn't accept that and it wasn't until the day Tom picked up an endless flat belt and, gripping it 180° apart and bringing his hands toward each other, we watched in amazement as the unsupported sections drooped down into a very desirable natural twist. This was exactly what we needed to open our minds, and the end result was the simple and effective "quadritwist" pedal drive unit that we use on the Escapade and Encore today.

A couple of years after this I went out to Seattle to meet Phil personally. While I was there he encouraged me to try out his Skiff-

cycle and so we loaded it up onto the roof of my rental car (no mean feat and a little paint got scraped off, as I recall) and headed down to the public docks on Lake Washington.

It was then that Phil and I really got to know each other. The Skiffcycle had rope steering and this took some time to rig, and so I held the boat up against the dock while Phil kneeled down, leaning over the boat to perform the task. After a few minutes my attention began to waver and, while I was gawking around, the Skiffcycle started pushing away from the dock until we both were leaning out beyond the point of no return. Two side by side splashes resulted both of us in the water with street clothes on.

Phil didn't hold this little incident against me. When we got back to his house and were drying off I commented about his copy of *Anthony Adverse*, which had been one of my boyhood readings, on the shelf in his library. A few days after I got back home this copy of AA arrived in the mail.

Phil had an incredible ability to design his boats for materials that the home builder could obtain at the local hardware and lumberyard. This type of engineering does not come easy, and those who advocate the KISS principal, and can invoke it, are few and far between. He obviously had that talent and is to be remembered and admired for this ability in and of itself.

We continued intermittent correspondence over the following years. Phil never failed to write back and always sent a sketch of what he was currently working on whether it was related to boating or not. One of my favorites is of what he called "Chassognelles," a French landscape which hangs here in my office today.



Phil's passing is a loss for the world, but the life he lived and the legacy he left us is a huge gift. He will be missed by those of us who appreciate his genius.

Curtis Chambers, Owner/President, Nauticraft Corporation, Norton Shores, MI

No Longer Boatless

Just bought a reconditioned Barnstable Cat from Howard Boat, just couldn't stand to be boatless any longer.

Bill Sayres, Largo, FL

Information Wanted...

Messing About in Small Boats

Many years ago my dad gave me a thin volume, no more than 100 pages, called *Messing About in Small Boats*. I have moved a few times since and in one of those moves I seem to have lost it. In looking for a replacement I've searched the Library of Congress, Amazon, all the usual places, but it hasn't turned up. Have you heard of it? Do you know where I could get a copy? Thanks so much for any help. Cheers!

David Hoyt, david@davewhoyt.com

Making a Model Canal

A bit of a coincidence that the January issue has a piece about canals. I'd just mentioned to Frank Strauss (who puts our Delaware River TSCA Chapter *Mainsheet* together) about how I'd given up on a high school science project to make a model canal. I couldn't figure out a practical way to control pumping water from "lower ocean" to "higher ocean" and gave up. I'm curious to find out if anyone has made a working canal model. If so, I'd love to know where it is.

John S. Smith, 6 Kenwood Ter, Hamilton, NJ 08610

Projects...

Thank You Thomas Firth Jones

Two days after Christmas, 50° with a little sun. A good day for a row on my local lake. Quiet and peaceful, I had time to think about how much I enjoyed rowing and sailing the boat I built ten years ago. I recalled the start of the process when my Bolger "Sweet Pea" was getting a little tight for my son and me to fish from comfortably. I decided to build a boat that would be comfortable for the two of us, that would sail and row well and could accommodate an outboard. It also had to fit into my garage, be easy to build (the last boat I built was a duck boat while I was a junior in high school, basically a box made of plywood) and, what was most important, it had to look good.

And so the process of deciding what to build began. I looked through my collection of magazines; *WoodenBoat*, *MAIB* and *Small Boat Journal*. Then it was through my collection of boat plan brochures and finally my library of boat books. Bingo! *Low-Resistance Boats* by Thomas Firth Jones had the answer.

Tom built the "Dobler" featured in his chapter on daysailers and described it as "the best compromise I've ever seen of the conflicting needs of sail, power and oar..." Well, I was inspired. Inspired by the details of the design, his experience with the boat and the sincerity of Tom's writing. Each design in his book came with an entertaining story, articulate, well written and clearly based upon his extensive experience as a sailor and a boat builder. So I bought the plans, which came with an offer to help if I ran into trouble, including Tom's phone number!

I followed Tom's recommendations and directions starting in the summer of 2004. By the following summer the hull was complete and I could row it and use it with my electric motor. Jordan and I used it for fishing while I worked on the spars, rudder and daggerboard. By the summer of 2006 it was ready for the spritsail I ordered from Dabbler Sails.

It was finally a sailboat but it wasn't an easy process. I made numerous mistakes along the way but what kept me going was reading and rereading *Low-Resistance Boats*.

Tom's words were encouraging and ultimately his description of the "Dobler" was spot on. I enjoy rowing it (the oars from Shaw & Tenney help), every year my confidence as a sailor increases and it invariably draws admiring comments wherever it goes. So I have Thomas Firth Jones to thank for providing the plans, getting me started and keeping me going. Years later I met Carol Jones at MASCF, she approved of the boat which pleased me to no end. The satisfaction continues every time I put it in the water.

Jack Mizrahi, Westchester, PA

Thin Waters and Creek Crawling

Hey there, Bob Hicks, loved the "Commentary" in V32/N8. Resonated with this "less than young" messer. Read the book reviews, too. Was struck by three things. First, for a traditionalist minded 80ish editor to offhandedly tell his readers to "just google" Lodestar Books gave me a real chuckle. You've come a long way uptown from your typewriter days, my friend. Second, I did google it and it's a great find. Third, the *Swin, Swale & Swatchway* was a great teaser.

The tale told read just like my early days exploring the Chesapeake Bay backwater creeks and, most especially, current days of poking about the thin waters of the Pamlico Sound and Abelmarle Sound tributaries. Just like the book says for the mouth waters of the Thames, the North Carolina Inner Banks rivers and creeks offer true backwater creek crawling experiences. I actually do keep a poking pole aboard my 12' sail/row boat as a blind man's depth sounder for finding floating water. I also have learned to respect hacked off tree branches and sticks jammed upright in the mud when under sail, especially the ones with beer cans crammed on the top, they're telling me something I need to know when I'm in water where the Coast Guard nuns and cans are not and can't.

I'm building a little thin water 13' row/sail boat (Yankee Pine Skiff) from a 1911 how to book for adventurous young boys wanting to build rafts and boats for exploring. It's about my speed of writing level for comprehension at my age. Sure interesting from a then and now historical perspective. For example, where do I now find 15' long, 4/4 thick, 15" wide, clear yellow pine boards? The book's figure of the builder holding upright (left and right hands) two such boards is downright fearsome awe inspiring. The book says to go to where the log rafts are tied up waiting to be sent down, pick out a clear log and have it carted to the sawmill.

Yeah, right, by Lowes or Home Depot? I had to get four 15', 3/4', 6" wide boards from a sawmill lumber yard 200+ miles away Downeast where the North Carolina world ends and they still build wooden boats and have trees to use to do it. My matching boards picture of myself holding upright one of each of my boards (right and left hand) is shamefully puny compared to the 1911 one.

I'll send you a little article when the build's further along. Some messer's might find it as interesting an experience to read about as I've had doing it.

Mike McClure, Washington, NC

Thank You Steve Lapey and the Norumbega Chapter of WCHA



I would like to thank everyone who worked diligently on the completion of the replica Rushton Indian Girl in 2012 for the WCHA Auction. She is beautiful, paddles straight and effortlessly on the water and is such a pleasure to use. Every time we take our Indian Girl on a day trip, walk her to the shoreline, people always remark at how beautiful our canoe is.

We are brushing a coat of varnish over her cherry decks and interior this winter of 2015 to keep the cherry in prime condition. We keep our Indian Girl in Westport, New York, and love paddling in the early morning on Lake Champlain. We have taken her to local Adirondack lakes for day trips. Our favorite is Lincoln Pond, in Essex, New York, which has upper and lower portions, it is a peaceful paddle.

Thank you so much for your hard work in getting her completed for the 2012 Auction. While I am out on the water paddling, they are by far the most peaceful times of my life.

Becky Wilson Albany, NY

Catboat Project One Year Along

Here is a photo of the catboat I am building, one year of occasional work along. It is Bill Garden's 12'4" Tomcat design.

Ron Render, San Diego, CA



This Magazine...

To Our Most Esteemed Editor

A most happy and successful New Year to you and yours. Thank you so much for printing my letter on your "Commentary" page (November 2014). I know that for yourself, a world famous and renowned publisher, to have your name in print and read worldwide is an everyday ho hum experience. To us, at least myself, it is considered a glorious experience, our 15 minutes of fame as it were.

As to the aforesaid mentioned letter, I really did mean it. After all these years of reading yourself, Mr Goldman, Dan Rogers, Doc Regan, Greg Grundtisch (with the lovely and talented Naomi), the nut cases at the Tiki Hut and others, I feel as though they are all my extended family. If I ever had the honor of meeting you or any of your writers it would be like meeting old friends I haven't seen for a while. There are few publications for which I can make that claim.

Now to more serious matters. Your "Commentary" in the January issue had me cracking up the whole way. *MAIB* is *MAIB*, it is what it is. Those who get it, get it. Those who don't probably never will. I can never thank you and yours enough for what you do, for *MAIB* is the proverbial dandelion break we all need to remind us that the simple things in life are the most precious and enjoyable.

The beauty of simplicity is the one thing, whether intentional or not, that *MAIB* expounds again and again. With so many people complaining how hectic their lives are, the answer to their mayhem comes once a month to my house. While they are beating themselves up on today's information superhighway I'll be on the *MAIB* dirt road smelling the dandelions and just digging what a beautiful day it is. And for that I can never thank you enough.

'til coal sprouts flowers...
Jon DeGroot, Davison, MI

How Many Years?

How many years have your efforts with *MAIB* been bringing me nautical enjoyment (don't need an answer)? *MAIB* is the glue that holds us all together, thanks to you, your family and contributors. I gladly renew my support.

Paul Breeding, Broomfield, CO (Scamp, Peep Hen and More)

Often Get Ideas

We always enjoy each issue, often we get ideas for travel from each. Thanks.
Bernard and Mary Stanke, Eagle River, WI

Glad to See "Beyond the Horizon" Again

I was pleasantly surprised to see "Beyond The Horizon" again. I would encourage Stephen to continue. I made an attempt to research this topic in hopes on contributing something of the like and was unable to make the grade. Glad to see someone else give it a try. We cannot replace Mr Ware, but we can attempt to keep his interest alive.

Gene Galipeau, Stanwood, WA

In Memoriam...



Hans Waecker

Sadly I have to report that Hans (Doc) Waecker died on December 10 in his sleep at home in Georgetown, Maine, 93 years, close to 94. He was a devoted Phil Bolger/Dynamite Payson boat builder. He also built ferro cement boats commercially at one time, not too easy

Poetry Corner...

Spiling A Plank

By Lew Payne

We are so godamned smart
In the dawn of the twenty first century, living proof of improvement
Of the species. The genome project, the terabyte,
Nuclear fission and fusion, arthroscopic surgery
Never has the world seen its like...

Except in the 14th century, in Italy of all places
Double entry bookkeeping invented in Florence, the assembly line at the arsenal
In Venice produced a ship a day with interchangeable parts
And Marco Polo traveled to China.
Not bad for Neanderthals.

For me, the spiling of a plank.
Who figured out a way to transfer a shape in three dimensions, with a possible twist,
Onto a flat plank for cutting and shaping, and have it fit on a vessel's hull?
I know how to do it, but whoever figured it out
Ranks with Copernicus, Newton, and Einstein.

A Metaphor for Life

By Dan Rogers

Catch. Pull. Feather. Recover.
The oars creak, and protest a bit.
Catch. Pull.
The feel of ash on palm, a bit rough, but soothing.
Feather. Recover.
A gentle slush from someplace up forward.

Catch. Pull.
The circles follow along obediently. Each a whole unto itself.
Feather.
Satisfying. But, so, so fleeting. Each circle.
Recover.
There's the little wake we leave. It spreads. And, disappears.

Catch. Pull. Feather. Recover.
It's what we do. Some, rapid, with purpose.
Catch.
Some, never quite in rhythm, never quite satisfied.
Pull.
Some, in what appears to be random, but delighted disconnection.
Feather.

The pauses come to last as long as the strokes. The boat slows.
The pond grows quiet.
Catch. Pull. Feather. Recover.
Always someone to follow. Someone to continue on. It's what we do.

while running his medical practice. He was also a contributor to *MAIB* during the 1990s. If you want to rerun any of his articles feel free to do so.

Martha Feehan, Georgetown, ME

As Martha mentions, Hans contributed a number of articles about his boat building from 1994 through 1998, during which years he lived on Cliff Island in Portland, Maine's outer harbor. His boat building there involved Bolger designs and his first article for *MAIB* in 1994 was entitled "Re Rigging Windsprint," a Bolger design. He later reported on his Maine Fisherman's Skiff, a Dynamite Payson design and ultimately on building a Bolger Auray Punt in Puerto Rico.

This came about due to his desire to have a boat to use while visiting there. Finding shipping the finished punt would cost him about \$700, he shipped all the parts and supplies in seven packages, each under 30lbs for \$135 (by US Mail!) and built the boat after he arrived in four days.

This determination to achieve his goals was not surprising having earlier read his 1997 report, "The Lost Allure of Ferro Cement," on his failed 1960s venture into commercial ferro cement sailboat building. As Martha suggests, we will reprint that story in the April issue (no room here).



Hans in action at the 1995 Maine Boatbuilders' Show, as pictured in our report in the April 15, 1995 issue. Show bargains were the Cliff Island Boat Doctor's unfinished skiffs. Here Dr Hans Waecker steps aside so we may view his "Cliff Island Ugly Duckling," offered at a show price of \$225. He also offered the more elegant "Cliff Island Punt" ready for owner finishing.

Princess

By Joe Richards
346 Pages (2nd Edition)
Published 1956 (1st Edition)
and 1973 (2nd Edition)
Library of Congress
Catalog Number 72-95162
Available through joerichardprincess.com

Reviewed by Dave Peterson

"I bought a Friendship sloop in the early spring of 1938. She was lying in a boatyard in Flushing, Long Island. Her name was *Princess*. It was neatly lettered on her transom in the arc of an eyelid. "NEW YORK" formed the lower lid. Where you might imagine an eyeball there was a 2" iron pipe that broke through the lovely oval of her counter. She had been crying, too, the rusty stains dripped down to her waterline.

I wish I could tell you what I thought of her at the time. I can't. Ask any man after all those years to tell you how he felt when he first set eyes on his wife. Now don't get me wrong. We have been through a lot together and we are still in love. She has thrown a lot of pots and dishes at me and I have stayed up with her through all kinds of bad times both ashore and afloat. Remember, I was 29 when we met and *Princess* was over 60, but she had the spirit of a kid.

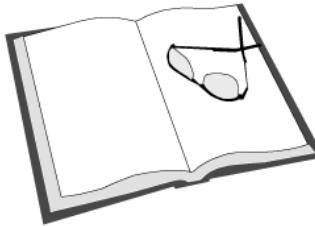
I looked the other way when I first saw her. Something told me, "This girl is not for you."

So begins Joe Richards' love story about a Friendship sloop he restored to glory. Like small wooden boats? Dream of adventure on the high seas? Have fantasies of sailing to a tropical island? *Princess* is for you. First published in 1956, *Princess* remains required reading for those who dream of going to sea on a small boat and sailing to that elusive tropical paradise. Richards draws the reader into a beautifully written odyssey to not only restore an old boat but to sail to a tropical isle where war and work are a distant remembrance.

I recently re read *Princess* and decided to introduce those of you who haven't read this wonderful story to one of the classics of small boat sailing. The book details the fits and starts of Richards' never ending restoration of a Friendship sloop (built around 1890 by Wilbur Morse in Friendship, Maine) and takes us on *Princess'* journey in search of a dream island in the Caribbean. All this is interwoven with Richards' professional life as an artist and his service in the Merchant Marine. Throughout the book, Richards includes graceful line drawings of *Princess* that provide ample evidence of his artistic skill.

There are two editions of *Princess*. The original, *Princess, New York*, was published in 1956. In a temporary escape from his career as an artist and America's impending entry into WWII, Joe Richards takes us through *Princess'* early restoration and her first trip down the inland waterway from New York to Fort Lauderdale.

As he draws us into his "affair" with *Princess*, Richards takes the reader on an adventure that begins at a boatyard on Pugsley Creek in New York City, then out through Hell Gate, on to Cape May, Annapolis and Chesapeake Bay, Norfolk, Charleston and other ports of call along the inland waterway to Florida. Along the way we meet an assortment



Book Reviews

of old salts, wayward seafarers and dreamers who share Richards' fantasy and admire *Princess'* classically beautiful form. We also learn about the wonders of the original construction of Morse's Friendship sloops as well as the details of *Princess'* restoration. It's a great education in boat building.

After Richards arrives in Fort Lauderdale, WWII intervenes and *Princess* is stored for the duration of the war in a boatyard near Palm Beach. Richards heads off to the Merchant Marine and the reader joins him in his exploits around the world. After the war, Richards is reunited with *Princess*. After more rebuilding and rerigging in Florida, Richards retraces his original journey on the inland waterway and takes *Princess* back home to New York City.

The second edition, published in 1973, includes a sequel, *Key Biscayne*, which begins, "An old dream is a tough thing to kill. It can hang on. An old dream about an island is all but indestructible." With his wife and children in tow, Richards takes *Princess* back to Florida, finds a new home port in Key Biscayne and then crosses the Gulf Stream in search of his elusive tropical isle. You'll have to read *Princess* to find out if his dream comes true.

Princess isn't just an ordinary sailing adventure. Richards has the voice of a poet and treats the reader to prose of unexpected beauty and grace. A few quotes to illustrate:

"Salt is the spice. Shaken into the wind out of the cellar of the sea, it peppers the eye and whets the gambler's appetite. The ocean can afford to book your bet. If she loses now, the rain will bring everything you own seeping down to her, if it takes a million years."

"The world is a thing of people, of places and of little things. The arrangement of these fragments, like the arrangement of these letters, spells the story."

"*Princess* surged to the trough, lifted to kiss the comber and ran the slope of sea, curling a silver bow wave into a trail of tress."

For me, it doesn't get any better than that. Both editions of *Princess* are out of print but are thankfully available from Joe Richards' daughter, Susan Richards-McClain, at www.joerichardprincess.com. In addition to being a fine writer, the author was an accomplished artist whose works are highly regarded and are still sought today. Ms Richards-McClain's website provides a brief overview of his work and sells Glicee prints of some of his best known paintings.

Many years ago, my father, a devoted "messer" in sailboats, canoes and just about anything that floated, introduced me to *Princess*. When he died several years ago I found a letter that Richards had written him in response to his request for a copy of the original 1956 edition, *Princess, New York*. Rich-

ards responded, "I have found several copies of *Princess, New York*, one of which I just mailed to you. I would appreciate your draft for \$5 for the book. It is getting quite rare. The book that is. Five bucks is as common as dirt. Forget about the postage." He not only wrote a great book, his letters were fun, too.

Read *Princess*, you won't regret it.

Andrew Jackson Higgins and the Boats That Won World War II

By Jerry E. Strahan
Louisiana State University Press
Baton Rouge, LA, 1998

Reviewed by John Nystrom

Andrew Jackson Higgins has been called the greatest unknown hero of World War II. Gen Dwight Eisenhower called Higgins "the man who won the war for us" in an interview with historian Stephen Ambrose. Higgins Industries, at one point in 1943, was estimated to have built or designed over 90% of the total hulls owned by the US Navy. By war's end Higgins delivered over 20,000 boats and vessels. Sizes ranged from 27' air droppable lifeboats to 170' freighters, but the boats Higgins was most famous for were landing craft and PT boats. The 36' Landing Craft, Vehicle, Personnel (LCVP) became known as the "Higgins Boat" and was derived from the Eureka work boat built by Higgins before the war.

The book reads more like an epic novel than the serious academic study it represents. Calling Higgins "brash, colorful, dynamic" is just being polite, to steal my mom's phrase, Higgins was a bull in a china closet. Higgins fought Navy bureaucrats, government red tape, mismanaged supply chains and racial segregation (Higgins not only hired blacks, women and the disabled, but also paid them equally) to produce boats that literally made what was once thought impossible a commonplace looking occurrence.

Higgins became a household name from his testimony before the US Senate's Truman Committee (which also made Harry Truman a political star). The whole protracted fight to provide the Marine Corps with adequate landing boats is a classic little guy vs Goliath story. Higgins LCM landing craft, after rejection by the US Navy, was finally given a head to head trial against tank lighters designed by the Navy itself. Not only was Higgins craft more seaworthy, it was able to rescue the Navy craft, its crew and cargo when the Navy LCM nearly founders.

Though the focus of this book is business, political and military history, the story of all of Higgins' boats, their use and development and the Higgins boat school will interest many *MAIB* readers. The boats are key to the story, but if the other parts of the story are not of at least passing interest, this might not be your favorite read. Higgins built boats from the 1920s until 1963. There is a Higgins Classic Boat Association, which maintains two websites mostly dedicated to Higgins civilian boats, <http://www.higginssclassicboats.org/> and <http://www.woottonmedia.com/sites/hcba3/>.

Beer in the Bilges

Sailing Adventures in the South Pacific

By Alan Boreham, Peter Jinks, Bob Rossiter
ISBN: 978-1-4759-2879-2

351 pages, 39 chapters, 60 illustrations
photos and drawings
Library Binding, Large Paperback
Also available as an E-Book

Reviewed by Ann Westlund

As a small boat sailor on fresh water inland seas, this book doesn't apply to my style of sailing and adventuring, however, it was interesting and a fun approach to cruising in the 1980s. The men were young, somewhat foolhardy and inventive/intuitive as they approached the sailing aboard the *Ron Of Argyll*, a classic yacht. Each of the young men had various adventures afloat aboard a variety of sailing boats and travels that came together on the *Ron Of Argyll*. Along the way Bob Rossiter met Hal Holbrook (actor who became Mark Twain on stage) and sailed to the South Pacific with him on the *Ron Of Argyll*.

All three of the young men had mixed careers of no careers, but lives that moved toward the sea, sailing boats and adventures. Assuming that the stories are based in fact, they do ring true. I was impressed with their skills as they repaired and maintained the big *Ron*, enjoyed their trials and tribulations as they mastered the big vessel's demands for provisioning, maintenance, power, leaks and getting along on their travels. They seemed to be amazingly adaptable and flexible.

Each of the men brought experience to the boat that helped at various times fill in the needs that arose. It was this mix of skills that made for interesting solutions to problems that came up and helped meet the needs of the old boat. It isn't a book of "we went there, we did this, then this and more of this" along the way. It's more a book that relates the travels that knitted together the larger stories with repairs and fixes, creative solutions to problems. There were many problems demanding solutions. I enjoyed reading about how able they all were at certain aspects of needed cures for the ills of the boat, or the geographic regions they sailed in before GPS and more certain navigation than the old sextants.

Bob Rossiter is a Kiwi from New Zealand, the Aussie, Peter Jinks, is introduced in Chapter Two and the third hand is Alan Boreham who hails from Canada. This is certainly a volatile mix of backgrounds, personalities (all strong) and mess of skills and experiences. It somehow works and the three cruise the South Pacific successfully, ending their time together as lifelong friends. I kept waiting for a blow up or other interpersonal troubles to crop up but they didn't seem to. Amazing!!

They approached writing the book the way they sailed together. They honored each person's knowledge, skills and achievements, writing a section at a time and working on it together sentence by sentence, paragraph by paragraph. Each author had the honor of expressing his memories and words without them being wrecked by jealous editing. It makes for a smoothly reading account of the travels and adventures. The details remained fresh and felt honestly presented.

At first I didn't like the book, but as the reading continued to the end I found I did like the book and would have enjoyed it if it were longer. The photos spread throughout the book are all black and white photos but they did fill out images I'd formed in my mind from the text, and these photos enhanced the book.

Flowers of the Sea

By Eric Schoonover

ISBN: 978-1-4507-7701-8

483 Pages, end notes and drawings of bridge deck and various ship's items
No photos except on cover
Large Library Paperback Edition

Reviewed by Ann Westlund

Eric Schoonover's book, *Flowers of the Sea*, is a novel set in New England and tells the story of a young man, David Stedman, who, as a mature maritime researcher, sets out to identify a pin, a jeweled flower he found at a shipwreck near his home when he was a young boy. This search takes him back to his childhood memories, the war years and family years. His awakening at the time of the shipwreck and the job, a search for paternity of a love child between a famous English nurse and a New England ship's captain, takes the researcher close to home and abroad. He discovers a widening circle of deception involving a small circle of people who fascinate the reader. It's a mystery without the blood running down everyone's hands. I'd call it a clean mystery of many elements, events and people involved.

At times I had to remind myself that it was a novel and not a story of realities. There are some grand scenes in it of sailing in the Rhode Island region. It's obvious the author has put in many observant hours at the tillers of small sailboats. I didn't want the book to end, it's that good. The language is clear, descriptions evocative of place and time, details enhance the scenes and characters, plus it is a darn good story overall. The story rolled through my mind when I wasn't reading the book. That's a sign that the author has done a good job of telling the story. It would be a grand novel to illustrate with photos collected to fit the situations in the story. I had the feeling it would also make an excellent, thoughtful movie, perhaps suitable for PBS or other mature visual media.

A Sail of Two Idiots

100+ Lessons and Laughs From a Non Sailor Who Quit the Rat Race Took the Helm, and Sailed to a New Life in the Caribbean

By Renee D. Petrillo

278 pages plus Appendix

Published by McGraw-Hill, 2012
Readily available from many sources

Reviewed by Hugh Groth

Sounds like it might be full of tips, maybe presented in a fun way, on how to sail,

doesn't it? I am not a sailor, but I wanted to know a bit more about sailing because some of my family members love it. I thought maybe I could learn enough terms and techniques to carry on a conversation.

I did get some of that, but the book is really a story about chucking it all and sailing away to a tropical island where you can live in bliss for the rest of your life, which is what Renee and her husband Michael did. Except possibly for the bliss part.

The "chucking it all" was really difficult. It took fully one third of the book to describe. Then there was learning to sail, which was alternately tedious and hair raising.

They planned to buy a small boat, learn to sail and live aboard for about three years, then find their ideal island home. What they bought was a 37'x23', nine ton catamaran with a 60' mast, three quarters the size of my house with more bathrooms. It was closer to a military landing craft than my idea of a small boat, but they were about to tackle the ocean so it was appropriate.

They traded their house on land for a house on the water, giving up the noise of cities and the tedium of jobs for the quietness and freedom of sailing. However, once one learns to sail there is still the maintenance, possibly more of it than with a land house thanks to the salt water, and often it is more urgent because help, or boat parts, are not always available, making safety a constant worry. Also, customs, mooring and island groceries are not cheap.

What the land house does not have is the need to anchor every night, hoping the anchor does not drag, putting the boat on the beach, on the rocks or into another boat. Furthermore, weather and sea conditions are constant threats, too much current, waves too high, storm coming or high wind. All this certainly compromises the freedom part.

Whew! She convinced me. I want no part of sailing to the tropics. Then again, I don't think it ever was my dream. It was, and still is, the dream for them and many others, which brings up a valuable component to this story, the boating "community." Without the constant help and social contact of other boaters, this odyssey would not have been possible, or at least it would not have lasted. Paths crossed with new friends all through the Bahamas and the Caribbean, always much to the delight of both parties.

They spent about a year making the change and learning to sail, another year enjoying the islands (between repairs and cleaning) and another year selling the boat and settling on one of those islands, coming out, as you might guess, in need of money but apparently happy.

She writes this book to "keep others from making the mistakes they made" so there are "lessons" distributed throughout the narrative, 106 of them. The lessons read like part of the narrative except that they are given a title and a number and enclosed in a box, which annoyed me. The lessons interrupt the story.

Renee recommends obtaining all the information you can find on the area where you plan to sail. She does not romanticize, as many books do, but rather presents a realistic description of what can and did happen to them, and does it in a lighthearted way.

I would not class this as a reference book for island cruising, although the last chapter and the appendix make a case for that. Skip the "lessons" or read them as part of the narrative. I found it to be just an engaging story, written in a fun, conversational and that is quite sufficient.

The Sea & Civilization

A Maritime History of the World

By Lincoln Paine
Alfred A. Knopf, New York, 2013

Reviewed by John Nystrom

Lincoln Paine's website (lincolnpaine.com) has a banner at the top of the home page that neatly summarizes the author's view of how the planet works. The picture is from the early 20th century and shows a passenger liner and a square rigger departing New York harbor side by side with the city in the background. Below the letters that spell out the author's name is a simple declarative sentence that says "All history is maritime history."

That may not sound like much more than an insight into the obvious to readers of *MAIB*, but in the world of academics and the study of history or any other aspect of our humanity, that is a radical statement. In virtually every field of study, maritime and nautical matters are given something of the short shift, if not ignored. A look at any world map makes that seem a curious fact. About 70% of that world map is blue. To quote the author's introduction, "I want to change the way you see the world map, by focusing your attention on the blues that shade 70% of the image before you, and letting the earth tones fade."

In our global economy over 90% of commerce moves over water sometime in its travels from raw materials to final disposition. Commerce over the seas is not new, or a sudden change, or a development of the last millennia, evidence of trade between ancient Mesopotamia and the civilization of the Indus River valley exists from 4,000 years ago. It isn't by accident that the first civilizations arose alongside navigable rivers. It isn't just commerce and trade, warships and explorers, disease and calamity that traveled (travel?) those seas and rivers. Art, religion, language and concepts of law, even human populations themselves, all moved across the globe on water, borne by watercraft big and small. Our world would look very different (and vast areas would still be unpopulated) if human beings had remained bound to only the land masses.

Lincoln Paine's previous books hint at the direction his thinking was going and include a maritime history of Maine, a history of warships before 1900, a history of the ships used in exploration and discovery, and, best known, *Ships of the World: A Historical Encyclopedia*. Paine has had predecessors who have examined various regions or periods or both from a decidedly maritime viewpoint, but all of the most acclaimed studies of world history or civilization in recent years have ignored, or barely mentioned, the enormous influence of the maritime world on humanity. It is small exaggeration to say that *The Sea & Civilization* represents the first comprehensive attempt at telling the story of humanity from a maritime perspective, from the viewpoint of travel, trade and communications over seas and oceans, along rivers and lakes.

The coverage, both as to geography and time periods, is comprehensive, the whole world and the whole of history is covered. Things move fast. The period from the begin-

ning of human migration, to peopling of the Americas and Oceania, the rise of Egypt and Mesopotamia, Bronze Age seafaring and trade from East Asia to the Western Mediterranean covers only some 200 pages. By the time another 200 pages have passed, Magellan is on his way on the first recorded circumnavigation. The end of 600 pages of text brings us to the present day with a better understanding of how we got to where we are. At least I did, and I'm supposed to be pretty well read on this sort of thing. (Yes, at one time I was an academic, but I saw the error of my way and lived an honest life instead).

The stuff at the end, the sort of thing most folks never bother with, "Notes," "Bibliography" and "Index," are actually better than most you see, especially nowadays. The notes are in a form that allows one to determine what the author was taking from the source and how it influenced how he presented it in this volume (you can't believe how rare that kind of detail is in author's notes).

Criticisms of the book seem to come, so far, from those who have a particular personal interest that is, of necessity in a single volume of this scope, not given the length of coverage that the critic wants to demand. I'm sorry, but the Age of Nelson is not the linchpin of history and World War II, as important as it is in our immediate memory, is seven years out of the last 6000 years of civilization, so it only gets eight pages. Far more important to me is that the author has avoided the pathologies that plague modern academic writing and research.

The author claims that, "...while ships are integral to the narrative that unfolds here, this book is less about ships per se than about the things that they carried, people and their culture, their material creations, their crops and flocks, their conflicts and prejudices, their expectations for the future, and their memories of the past." All those things seem inseparable from the boats and ships.

In the chapter, "The Silk Road of the Seas," Paine discusses a ship and its cargo that illustrates for me the intellectual cost of ignoring our maritime past. The archeological find was off Belitung Island in the Java Sea. Believed sunk in the year 826, the ship was built in the Persian/Arabian Gulf region of wood from India and Africa with the keel imported from the region of Zaire, far inland. The hull is stitched or lashed together with palm fiber cordage. The cargo is no less amazing. Ballast is lead ingots, but 60,000 pieces of Chinese ceramics, many still intact, make up the cargo. Dates on the ceramics are 826, and coins are all older. The ceramics are packed in jars from Vietnam and spices onboard are native to China or Southeast Asia. The ceramics are from Hunan province, which is inland. The colors and motifs on the ceramics indicate they were destined for the Abbasid Caliphate (Arabian Peninsula, Tigris and Euphrates valleys). World trade is not a modern invention.

It will be some time before we know if *The Sea & Civilization* changes the way historians or the public looks at our nautical world. I had the local library order the book, and read it this past holiday season. My wife, a teacher, after reading the introduction and listening to me read brief passages aloud to her, has informed me we are buying this book. It will, at least, change the way some children in Logansport, Indiana, are taught world history.

What's in Your Boathouse?

Amazing Stories of Nautical Archaeology

By Bob Matson
North Star Press of St Cloud, Inc
St Cloud, MN 2013

Reviewed by John Nystrom

Any pursuit, hobby, pastime or business that involves physical artifacts from the past, whether the ancient or the recent past, has a body of lore, a corpus of legends, a collection of folk stories or just a bunch of tall tales and lies repeated reverently of the "barn find." A barn find is the discovery of the object of shared affection, whether it is an old boat, car, airplane or whatever that was put away in storage long ago and forgotten, only to be rediscovered, restored and put back to use. The rarer and more historically important the artifact, the better the story. The big plus for the nautically afflicted is that our artifacts, namely boats, canoes and associated hardware, have their own special barns, that is boathouses to be exact.

Bob Matson restores vintage outboard motors and boats in Ely, Minnesota, which is on the edge of the boat and canoe paradise known as the Boundary Waters. Bob says there are a bunch of boathouses in his corner of the country, which makes sense since there are so many lakes and only two seasons (namely winter and July) so the boat gets stored a long time). For some time the author has collected stories of boathouse, barn and garage finds, the first chapter in the book is his own story of finding and restoring a 1958 Crestliner.

The book's 23 chapters are each short reads, well illustrated with photographs of not only current, restored condition, and pre restoration "in the barn shots," but also original owner pictures when available. The boats and owners cover quite a range, including *Thunderbird*, the one of a kind 55' Hacker of Lake Tahoe fame, all the boats used in the filming of *On Golden Pond* and other celebrity boats, all the way through boats that have been in one family of owners and were pulled from the boathouse or barn to be lovingly restored and used by the family's later generations.

Apparently a utility or skiff with a bit of history and back story can make as good a barn find story as the 1927 ChrisCraft runabout with its original Scripps engine and hardware intact, or finding an ultra rare ChrisCraft Cobra in a farm-yard in North Dakota (yep, there really is a story of a Cobra found on a farm). If this isn't enough, the author mentions that he is still trolling for more stories like these, he wants to do another book so his contact information is included.

The author included not only stories of antique and classic wooden motorboats, but also classics built in aluminum, fiberglass and plywood. While most of the book is devoted to beautiful and functional art in wood and varnish (and rightfully so), I was fascinated by the inclusion of a 1959 Correct Craft with tailfins (and they look even better on a boat than they do on a '57 Chevy), the carAqua (sic) with twin Scott-Atwater outboards and aluminum boats by Crestliner and Feather Craft. After looking at the tumblehome transom on the Feather Craft Vagabond, I'm wondering if there isn't an aluminum powerboat in my future. Anyone know where I can find one real cheap?

There is a group of islands near this point all named "The Ducks." It was mid afternoon and our plan was to anchor in a sheltered bay on the north side of Grand Duck and then head across in the morning. The best laid plans of mice and men often go awry. I would have thought that a heavily keeled boat with the stick laying on deck would be very stable. Wrong. The waves on the lake were about 3' high, not really bad weather at all, but enough to give the boat a very uncomfortable feel. The boat had a very quick motion that surprised us all. We never made it to Grand Duck, instead we turned back into the bay and found a sheltered anchorage and dropped the hook. We spent the night and most of the next day in this anchorage that we shared with several other boats. None were occupied at that time.

In the afternoon I was over the side sanding and varnishing the rails from our dinghy when I noticed that the wind had backed off. Dale noticed it, too. So I put the tools away and we pulled the dinghy back on deck and got underway. It was nearly dusk when we got back to the lake. The lake was calm and flat so the decision was made to cross the lake in the dark.

Back in St Paul, Amy had insisted that I should go all the way to the Chesapeake with them. I knew better. I told her that we would be getting on each other's nerves long before we got that far. This was beginning to happen about the time we got into the lake.

Dale was on the wheel as we started out. He called down to Amy that he needed

Remembering the Canals

Part 3

By Mississippi Bob

a heading. I went below to watch Amy work this out. Looking over her shoulder I figured out a heading and went back topside and told Dale our new heading that I had worked out in my head. A few minutes later Amy came up with her numbers. They were within a degree of my guess.

It was totally dark by the time we approached the eastbound traffic lane on the lake. It was somewhat hazy but we could make out one eastbound freighter that passed in front of us. I hoped that he had seen us. That was the only ship we saw that night. I was on the wheel in the middle of this crossing when Amy came up and looked at the GPS and announced that we were a hundred yards off our rhumbline. I told her that we were in the middle of a very large lake and I didn't think that it really made much difference.

As we approached Oswego on the US coast our navigation had to get more precise. I went below and studied the chart and memorized the approaches to this harbor. The harbor had a set of jetties sticking a short distance into the lake and a breakwater across in front of them. Our course was pretty obvious, we should go around the western end of the breakwater, then in between the jetties to find a mooring. Obvious but still confusing due to the numbers of lights that we had to sort out. Dale was on the wheel and I was standing beside him. Between the two of us we threaded our way into a safe harbor. It was now about 1:30am. We found a dock space just off the channel and tied up and went to sleep off the rest of the night.

In the morning Dale went looking for a place to clear customs. The nearest place was 40 miles away but they had a camera phone at the marina that could look at our faces and our IDs. We got approval to stay in the US. This was shortly after 911 and everyone was suspect. We then headed upstream in the Oswego River. We passed through four locks and arrived at the junction with the Erie Canal. We headed east again now in the Erie.

We stopped at a marina on the west end of Lake Oneida where Dale rented a car, a convertible. He and Amy left me for the day as they went back to visit his Alma Mater in Syracuse.

The next morning we headed out across the lake and back into the canal. We stopped at different places than I had seen on my earlier trip but it was still the same old canal. When we got to the Hudson the federal lock was just as slow as on my first trip. When we cleared this lock we figured out that we had passed through 85 locks since leaving Lake Huron. This was a real busman's holiday.

We made several stops on the Hudson, once to get our mast back up and another where we anchored among a fleet of other sailboats. Another yachtsman rowed over and invited us to dine with them. We went over in our dinghy and had a nice evening. Good food and lots of wine.

The next morning we moved downstream to Nyack. There we tied to a buoy and the marina sent a motor boat out to bring us

to shore. In the morning we went ashore and walked uptown for breakfast. After that we crossed the river and fueled up before heading under the Tappan Zee Bridge. From there it was an easy trip down to the Big Apple.

We had been towing our dinghy since we had put the stick up. As we passed under the George Washington Bridge we hit a strong upstream wind and had an outgoing tide. This made a very chaotic wave pattern. I looked back and noticed that the dinghy was filling fast. Dale gave me the wheel and told me to run as slow as I could and still have steerage. Dale and Amy wrestled the dinghy alongside and up onto the foredeck. A few tense moments there. When all was secure we continued down to a mooring in uptown Manhattan. We caught a buoy for the night. Dale and Amy went ashore in the dinghy, she wanted to see the garment district.

In the morning we headed downstream headed for the Liberty Marina in New Jersey. The traffic on the river was terrific. There were water taxis everywhere. They had lost the use of a main tunnel under the river because of the 911 attack and a lot more people needed a ride to work in Manhattan so every water taxi was working full speed. We turned towards the New Jersey shore and found the marina. This is where I departed. One of Dale's daughters was joining the crew there. It was a good time to bail out.

They have a retired lightship tied up at the marina with the name *Liberty* painted on its sides. This was being used as an office and restroom for the marina. I took a shower and went back to the boat to say goodby. I took a water taxi to the Battery on Manhattan, then a train to uptown to the bus station. I had several hours before I could catch a bus to Toronto. I wanted to see the New York that I hadn't seen before. I didn't want to drag my sea bag around all day so I looked for a locker to stuff it in.

Remember 911? They didn't have lockers any more. Someone might leave a bomb in one. What to do? I found the Greyhound express office and repacked my bag. Put everything I would need to get home in my backpack and shipped the sea bag. I even kept my thermos jug and managed to get it on the plane latter.

I spent the afternoon touring Central Park and Ground Zero then boarded an overnight bus to Toronto. After seeing New York, Toronto was a wonderful place to visit. I walked downhill from the bus station. The lake must be there. I spent several hours visiting the parks and marinas along the lakefront. I even found a canoe club that was active that morning. Latter I toured the CN Tower and paid for the trip up. I like Toronto. I can't say that about many large cities.

Time to head to the airport so I found the subway and rode to the airport. We took off for Minneapolis late in the afternoon. I had a window seat but I was afraid that it would be too dark to see much. I was wrong. We were racing the sun to the west and I could make out much of the ground from the trip that I had just completed. From 30,000' the ground below looked like one big navigation chart. As we crossed over Lake Michigan I recognized islands that I had sailed past on an earlier trip. We passed over Green Bay near Sturgeon Bay where I had ended one trip.

On over Wisconsin. When we passed over the St Croix River I knew I was back to Minnesota. When the plane was on the ground at Minneapolis it was dark.

KITTERY POINT TENDER



10' x 48" Handlaid Fiberglass Hull
Traditional looking Yacht Tender
Specially Designed for Ease of
Rowing and Minimum Drag When
Towing
Row & Sail Models

BAY of MAINE BOATS
P.O. Box D • Kennebunkport, ME 04046-1693
maineboats@roadrunner.com

Buffalo Maritime Center TSCA Gathering

By Greg Grundtisch
Photos by John Montegue



BMC director Roger Allen sailing.

The last fall messabout of the 2014 season for the Buffalo Maritime Center TSCA Chapter was held at Presque Isle State Park, in Erie, Pennsylvania. This location was chosen by Mr Dick Weisen, who was filling in as interim president after President Chuck Myer had crossed the bar recently. It was an excellent choice and a beautiful location.

Presque Isle State Park is a long ten mile narrow strip of land that acts as a barrier island protecting Erie's Harbor. The park has several improved launching areas as well as many primitive launches for carry in boats. There are many coves, ponds and streams for canoeing and kayaking as well as the beach on Lake Erie and the bay on the south side. The park also has many picnic areas and restroom and shower facilities that allow for extended stay and overnight camping.

This fall gathering consisted of about 30 members and close to 20 boats of various designs, mainly canoes, kayaks and a few sailboats. The members and boats were located on the south side of the Park on Misery Bay and stationed at several launch locations along the shore. Our little group launched at the east end of the park on the bay side. We had several kayaks, two sailboats, a rowboat and the lovely and talented Naomi's sailing peapod. The nice thing about TSCA events is that everyone shares each other's boats. Anyone can try out any member's boat, and if a member is there without a boat, there is always one available for use. It is a great way to evaluate a boat one may want to buy or build.

After a perfect October fall day of messing about on Misery Bay, (the reason for the name escapes me) we gathered for food and drinks on shore. The table discussion was witty and interesting, discussing various boat designs, improving the ones used this day and others that will be used in the future.



John Montague sailing and Brad Sweet in the kayak.



Rigging Naomi's peapod.



Naomi and Rebecca Montague getting ready to sail.



Peapod and boats at the launch.

But then the topic changed to the idea of nominating Naomi and I as co presidents for the local Buffalo Maritime Center chapter. Naomi has the charm, temperament, talent and leadership skills necessary to be a fine president. Me, not so much. But because

we couldn't coerce anyone else to do it, we agreed to give it a try. A week or so later it came to be. Naomi and I are always willing to help out the Center and the TSCA chapter any way we can, even though we don't know how to be, or what to do as presidents. Not knowing how to do something has never stopped either one of us. As my grandma would say, "Not knowing something just tells you exactly what you need to learn, get busy and figure it out. They did, and you can."



Dick Weisen explaining how Naomi would make good president, Naomi with the big hat next to the beer cooler, her favorite spot at a table.

This Buffalo Maritime Center is a very active chapter of the TSCA and we are always looking to have more folks join, either our chapter or one of the many others across the country. It is a lot of fun and one can learn a lot about any and all aspects of traditionally built small craft. The pleasure, experience and camaraderie the TSCA offers are second to none. I highly recommend it to anyone who enjoys small boats, whether already a boat owner or not.

Google it you'll like it.

Contacts for the Buffalo TSCA:

grundys@fantasiadesign.com
grundyswoodworks@roadrunner.com
BMC, 90 Arthur St, Buffalo, NY 14207
Phone (716) 881-0111





The Missouri River 340, a paddling event started by a group of enthusiasts at Rivermiles.com in 2006, is a four day nonstop race that starts at Kaw Point in Kansas City and ends at The Lewis and Clark Boathouse in St Charles (near St Louis) 340 miles later. The racers range from serious competitors in sleek racing canoes and surf skis, to people out to test themselves in more conventional paddlecraft. This is an ultra marathon. "Just finishing is an accomplishment," the often heard and somewhat hollow consolation in other events, is dead on true for the MR340. Racers have 88 hours to complete the course. For more info check out www.rivermiles.com.

I have entered and completed this race three times since 2009, including the 2012 race when the daily mercury topped out at 104°. Every race was different due to the water level and current, the weather, the bugs and the people. However, my first race was special because it tested me as never before. Florida's Gulf Coast and the tannin dark waters of the Myakka and Hillsboro Rivers were my first introduction to kayaking and the pleasures of being a river rat. Later, I dragged my wife on tandem excursions and primitive camping trips on the Suwannee, Ocklawaha and Florida's web of Atlantic wetlands. I have been caught in riptides, storms and floods. None of my previous adventures compared with the Missouri River 340 race.

I entered the 2009 MR340 in the Men's Solo division paddling a Wilderness Systems Tsunami 145 kayak, not a racing boat but suited for rough duty and a solid multi role performer. I had put the 30 mile Two Rivers Throwdown and the 50 mile Gritty Fifty races under my belt and had trained long hours, including a trial run on the first daylight leg of the 340, Kaw Point to Waverly. At the race start on August 4 I felt reasonably confident in my physical condition. Performance would hinge on willpower and preparation. The MR340 challenged both.

My friend and training partner, Old Crow, was likewise trained, equipped and prepared. At Kaw Point we set out in mid-pack (some 250+ boats) angling upstream to leave the Kaw and enter the swifter Missouri, avoiding the chaotic crush of boats swept together at the downstream junction. Among the paddling multitude, Old Crow and I settled into a steady race pace, enjoyed the clearing weather and traded hails and jibes with fellow racers. It was St Charles or bust.

As the river miles fell behind us, the digital numerals on my wristwatch became meaningless but for the targeted checkpoint

Facing Down the Bear

Thoughts on the 2009 MR340

By Marty Woodward

deadlines. Race checkpoints, their landings crowded and not meant to handle a constant rush of boats and people, were minor challenges in themselves. Sometimes we would just touch and go, get our signatures on the checklist and shove off, or we would find our ground crew, Old Crow's wife, and wolf down sandwiches and chug cold drinks. Amid the chaos, the race staffers at each point did an excellent job of keeping the boats moving, their efforts restricted only by the confines of the landings. Throughout the race, despite the long, hot hours and lack of sleep, these heroes were always friendly and helpful, genuinely concerned with the racer's welfare. They were all good company.

Old Crow and I spent the first night at Hills Island. Arriving after midnight, we found the island looking like Kubla Khan's Xanadu in the moonlight. It was not. We were exhausted after 15+ hours of paddling under the sun and moon, we tossed our sleeping bags on the sandbar and tried to sleep. The sand was hard, man, hard. My back would remind me of this the following day. A swarm of starving mosquitoes tried to find a hole in our DEET defenses, the ultra whine of their wings like needles in our ears. The alarm clock setting on my cell phone chimed at 4am. Old Crow and I stuffed our gear into our boats silently and set off in the moonlight, still exhausted, neither one of us having snatched more than 30 minutes of sleep from the Mosquito Coast.

Light from the full moon transformed the water into rolling, sliding oil, the dark wall of trees lining the shore framed our course against the sky. Navigation hazards permitting, we kept to mid river. Paddling in the soft darkness, I listened for the telltale rustle that would predict a channel marker buoy, snag or wing dike ahead. As the eastern sky lightened, Old Crow remarked his shoulder was beginning to ache. At Glasgow, I would go on without him.

The decision to continue alone was not an easy one. I felt bad for Old Crow, this guy who had only mentioned twice in 25 miles that his shoulder was giving him trouble. Knowing him, I knew the old sergeant was likely in great pain and it was certain he hated being forced out of the race by an injury. He was not the type to say so. Already we had seen much younger 20 something guys drop

out. It's a tough race. If I called it quits, perhaps it would take some of the sting out for him. Perhaps this development was just the excuse I needed, make it a case of maybe next year, Coach.

My spirits were low. Lack of sleep pulled at me like a black hole and at 2:30 in the afternoon the August heat had drained me. I kept thinking of how dangerous the night river was and that to run it that night, as I must if I wanted to stay ahead of the checkpoint times, would be near madness. Also, the dreaded and mythic Lisbon Bottoms awaited me just a few hours downstream. But some part of me, a stronger, stubborn part, told the guy who suddenly wanted the television and easy chair and, my god, an ice cold gin and tonic, this was just another camping trip. Go down the river and find a place to sleep. A simple process; paddle, sleep, paddle again, repeat until finished. I called my wife to double check my life insurance, Old Crow said he would meet me at the Jefferson City checkpoint the next day with a cold drink ready for me.

Setting out alone, leaving the Glasgow checkpoint and my friends in the bright heat, I found the river had changed. It had become larger. And in some kind of zero sum trade-off, I had become smaller. Fellow racers were few and far between now. I would paddle for miles without seeing another human being.

It was this part of the journey that became almost dreamlike, the river's environment seeping into me like a drug. The sight of a bald eagle perched high in a cottonwood over the river, the musky scent of the sycamore trees along the banks and the rattling call of a kingfisher all became crystalline in my consciousness. At night all sound was amplified, the unexpected burst of a pop-up boil like a living animal surfacing beside my hull, the flop of a startled fish, the tearing sound of a distant riffle and the eerie voices of owls and coyotes all gained prominence in the night. These sights and sounds became like landmarks on my psyche, distant cousins to the hallucinations that danced in the moonlight or stood like stone golems on the shore, silent, watching me pass by weary and desperate, searching for a pull out before I dozed off in mid river.

The journey became a metaphor for life. Not original, I grant, but a metaphor that I realized held truth. As I paddled alone for the rest of the race, people came and went, some at the check points, some passing me, some being passed by me and some paddling along for a time in brief camaraderie, all different people yet all fellow travelers. I had to leave behind a friend and, at 50, I had my share of



fallen comrades and absent friends. I showered at the Cooper's Landing checkpoint and emerged clean, read into that what you will.

After four days of paddling, sleeping on the riverbank, telling myself to keep the paddle moving, drink some water and pop some electrolyte beans and keep an eye out for barges that could complicate my journey, I neared the end. I thought of my daughter, who had downloaded the music selection for my iPod, and of my wife, who had encouraged me and whom I hoped was not upset because I had not called her the last night as my cell phone battery, despite careful conservation, had died.

I logged 15 minutes at the last check point to stretch and top off my water jug and convince myself that my paddle did not weigh 20lbs. Closing in on St Charles, I miscounted the landmark bridges and the finish came quicker than I expected. It was here, as I neared the Lewis & Clark Boat House and saw the crowd of staff, racers, ground crew, and families, a welcome banner stretched high in the air, the metaphor became complete. Old Crow was there, waiting for me, smiling, his shoulder healed. Strangers cheered and congratulated me, shook my filthy gloved and aching hand. Seventy-

nine hours. The timekeeper asked me what I thought of the experience. After searching and sorting out my feelings, a line from a Jimmy Buffet song occurred to me. I told her that the pleasure had been worth all the pain.

That evening, as I dozed in the passenger seat, an empty soda bottle slipping from my fingers, Old Crow and his wife took me back to the land of shopping malls and lattes. Still feeling the phantom rocking of my kayak, I slept that night, exhausted and sore, but with the knowledge that I had faced down the bear. These four days in August replenished me. The river is a source and the Missouri River 340 is not just another race.



Rugged. Beautiful.



Combined with WEST SYSTEM 105 Epoxy Resin®, blush-free 207 Special Clear Hardener™ gives the discerning builder excellent wet-out, ideal cure times, superior strength and an unsurpassed water-clear finish.



**WEST
SYSTEM®**

866-937-8797

www.westsystem.com



STEAM AGAINST THE WIND.

ICE-YACHTING ON THE HUDSON.

An ice-yacht flits about like a swallow, skimming over the river with the speed and grace of a bird. She is better than a bird, for she takes you along in her flight and gives you the triumph of the wing, as she sweeps, and swings, and trembles on through space. Mount this wayward flyer as she is launched upon the wind. Your course is down the Hudson from Poughkeepsie, and, as your sail begins at a moderate speed, you can observe the scene.

The old river is not now in its human, sympathetic mood, when it hums with talk and song, and its banks are bright with lawns and flowers. It is a long, narrow, level valley of ice, all gray between its dark brown headlands. The hills are sober in a fur of bare trees, and the fields are bald and white with snow. As you look eighteen miles down the narrow valley, it seems walled in by high headlands marking a long perspective, down to where the Highlands close about it with a wall of hoary mountains. The pure, keen air gives even the distant scenes the clearness of a miniature. Here at the start are the shores of Poughkeepsie, with smoking furnaces, deserted docks, and sloops bound in the ice. Two miles below, on the right, is Blue Point—a high head of rock frowzy with bare trees. On the left are the cuts and tunnels of the railroad and the high cliffs, hung with gleaming icicles; and a train comes thundering into the wintry silence and veils the bluffs with steam and smoke. Farther on are the docks and houses at Milton nestled under the bank, and the Barnegat hills opposite covered with an olive-black forest of arbor-vite. On the right, the deep gorge of Marlborough veils its winter sculpture with golden willows, and the bold headlands of Hampton roll along the shore. Opposite these is the village of Newburgh. The valley expands still farther on into the broad bay of Newburgh, lying at the base of the Highlands. It is a long,

narrow stretch of cold and desolation. And yet, in gliding about, you get glimpses here and there of cheerful, active life. You may peep into fishermen's huts on the shore, where men are netting; or at a deserted mill tottering back under the rocks, while its perennial brook still sings and sparkles down the cliffs, now white with icicles and beds of frost-flowers. Your mind may linger about the farm-houses on the hills, where warmth and cheer fight off the winter cold and the biting breeze. It begins to blow more, and you find yourself flitting about from village to village with a quick and pleasant motion. Teams crossing at the ferries shy at you and hasten their pace. Gangs of men are working at the ice-harvest; fishermen are hauling their nets up through the ice or skating hastily toward little signals that respond to a "bite"; foot-passengers are gingerly picking their way on the slippery surface; groups of men and boys dot the ice with their black figures and reflect the sunbeams from their skates, and more retiring couples swing along, hand in hand, in the little bays and coves.



FISHING THROUGH THE ICE.

Ice Yachting 100 Years Ago

The fastest man made vehicles in the world just over 100 years ago, in the 1880's, were the big ice yachts popular on the Hudson River, with speeds we now know were in excess of 100 miles per hour possible under ideal conditions. "Scribner's Monthly" magazine of 1881 carried a lengthy article on sailing these craft, with a follow-up on how to build one. Thanks to a reader, we can bring you this look into the past when iceboats were very big and very fast, and a topic of great interest to the general public.

25 Years Ago in **MAIB**

These bits of life and color are doubly welcome in the desert of winter, cold, clear, and stern. The stillness of death is broken only by the loud cracking of the ice—mutterings of the old river making a continual roar. You hear many sudden snaps, and the clear ring of thin sheets of ice falling in the "windrows"; then an angry crash from ice along the shore. The deepest tones are the loud, musical notes of a great crack that starts under your very feet and runs off to the bluffs.

All the large cracks run across the river. The lateral expansion finds room by crowding the ice upon the shores; but as the expansion up and down the river is prevented by bays and points, the ice buckles up in ridges across the river. Sometimes the bend goes downward and forms a hollow filled with water, until one side of the ice, dropping below the other, is caught by the tide, and broken off, and carried away. Such cracks often remain open all winter, for the water, boiling up from under the ice, is not easily frozen. In other cases, the bend goes upward and raises a ridge or bridge, sometimes several feet high; this does not interfere with travel until one-half drops down and makes a step or fault. The river is divided into long lanes and fields of smooth ice by windrows crossing in every direction. In some regions the windrows are so numerous as to prevent sailing; in others, large expanses offer good ice for long distances. When the first ice formed, it was so thin that it broke loose from the shores in large cakes or "fields"; these, in floating against one another, fractured the edges, turned them upward, and made ridges of broken ice, some of which are thin, clear sheets standing at every angle and flashing like mirrors. The yacht glides about in these fields and lanes, avoids the old mounds and windrows of snow-ice, and now and then dashes through a thin windrow, while the scales rattle and gleam like crashing glass.

All at once, you seem to be running straight into a hole of still, open water; in an instant you are skimming over the glassy surface of new ice. As you look down, you see muddy water floating under you in small, boiling currents like little clouds. The ice in places is quite full of bubbles; those near the surface are all white with delicate frost-work such as you have seen on window-panes: those farther below, being protected from the cold, are as clear as cut-glass. Here and there is a catacomb filled with the skeletons of grass and ferns torn from the mountain brooks. The ice is all faintly veined and marbled, and tinted with reflections of the heavens. It seems like a picture of a dim twilight sky, with crystals for the stars. In other places it is a record of Nature in a warm and lenient hour, when she modeled in the ice little landscapes with gorge, rivulet, and bluff, and decked them with white flowers; but Old Winter caught the ripples playing with the wind and petrified them. There are great lumps of light, as it were, where blocks of ice lie in the sun; mosaics of frost-flowers, and Nature's geometry of crystals; and beautiful fractures, some of them composed of flat spiral strands like the threads of a screw, which gleam in the sunshine like a rope of rainbows. Thus the scene and the experience of ice-yachting are full of the weird and the magical. The gray desert of winter gleams with vivid colors; the silence of death is broken by roars as of sharp agony; you move airily over the surface of the deep; you lie still as the dead, and yet you glide about with the unearthly ease and freedom of a spirit. And your eagerness of expectation matches the keenness of the air and the brightness of the sunbeams on the winter scene.

You go on down the river now with a good wind on the beam. The playful breeze freshens in flaps, as if trying to escape you; but still you follow its wayward motions: you start when it starts, slit over the ice with its own speed, turn and glide with the lightness and the grace of its own whirling dance. The ice-yachts darting about look like white-winged swallows skimming over the ice: as they cross and recross your course, you hope that every captain knows his business and will avoid collisions. The ice-yachts have anticipated your wish, and flown away to various points of the horizon while your thought drew its slow length along. The ice seems to be running under you with great speed, and you sometimes feel that you might easily drop off the open, spider-like frame of the yacht. By such rapid motion, the bubbles, crystals, and lines of the ice are all woven into a silky web of prismatic hues. You distinguish only the cracks that run with the course; and, when they deviate from it, they seem to jump from side to side without connecting angles or curves. The mounds and the windrows seem to come up at you suddenly, and dodge past. You begin to hold on to the hand-rail, and lie close down in the box. If you are steering, you feel that your hand is the hand of fate; and the keen excitement nerves you to extraordinary alertness. The breeze sings in the rigging; the runners hum on the ice



with a crunching sound, and a slight ringing and crackling; and a little spurt of crushed ice flies up behind each runner and flashes like a spray of gems. The yacht seems more and more a thing of the air,—her motions are so fitful, wayward, and sudden. The speed with which you approach a distant scene makes it grow distinct while you wink with wonder. Things grow larger, as if under the illusions of magic; you feel the perspective almost as a sensation. You turn toward a brown patch of woods; it quickly assumes the form of headlands; these are pushed apart, and a gorge appears between them; while you stare, a stream starts down the rocks, behind the trees; a mill suddenly grows up; the rocks are now all coated with ice; statues of winter's sculpture are modeled before your eyes, and decked with flashing crystals, just as you turn away to some other point of the horizon. So you seem to be continually arriving at distant places.

A regatta is to be sailed over this course, and you arrive in time to see the start. The yachts all stand in a row, head to the wind. At the word, the first in the line swings stern around till her sails fill; she moves off at once, and the crew jump aboard,—one man standing or lying on the windward runner-plank and holding on to the shrouds, and the helmsman and another man lying in the box. Then the other yachts successively swing around; and, in a moment, the whole fleet is under way, gliding in zigzag courses among the windrows and mounds. They all diminish in apparent size with astonishing rapidity; they seem actually to contract in a moment to a mere white speck, skimming about the river miles away. You join the crowd of men and boys stamping and slapping to keep warm; you exchange a few words with a friend, and when you turn around again, behold the yachts sweeping down upon you! They grow as they come, flying at you with a wayward, erratic course, and you feel the wonder of embodied speed. The ten-mile race of the ice-yachts is lost and won in as many

minutes. But for those who sailed it, these minutes were filled with more excitement than is found in many a long life-time.

Embark again and return up the river. The wind, freshening all this time, now pours down over the banks of the Hudson in strong gusts. The sky is partly covered with clouds; the gray desert of winter has lost its gleams of color; snow-squalls enshroud the dark headlands, and the grim face of Nature frowns with stormy gloom. It is a time to draw up to the fire and talk of storms, while one is basking in luxury and warmth. But you are launched upon the wind; the light snow whirls upward in the ice of the mainsail, and she seems a spirit of the air in a cloud, sweeping onward like a whirlwind. The wind howls in the rigging, the ice crashes, the runners ring, and you hold on to the shrouds in a nervous frenzy of excitement. As she turns in her sudden motions, you feel as if your body were trying to fly on in some swift tangential course, even though your hands and feet remain. Space opens freshly before you every moment as a strange, devouring void, and you fly into it with a wild, erratic motion, seemingly beyond the rule of human will or natural law. You are not shut up in a ponderous train—a whole world of material, roaring, jolting matter. Here you fly alone through the keen air and the flashing sunshine, with the speed of a bird soaring in the sky. But your eyes are not those of an eagle, and they see things changed by the rapid passage. Objects seem melted down and drawn out into blurred, elongated forms; shapes and colors are lost, and things look blue. Now the wind lulls again; you listen to the roaring of the gust sweeping up the bluff and through the bare forest; then a louder roar comes on, as an express train thunders out of the tunnel. The windows are filled with eager faces, and waving handkerchiefs stream in the wind; the engine blows a shrill challenge, and you wave an acceptance. But the wind plays you false, and the train

passes in triumph. Then all at once you get the breeze and move up; you skim along with ease compared to the thundering tread of the iron horse, and you gain on him. As you come abreast, the windows and platforms are crowded with excited people; you hold on your course and, with the next gust, pass them as though they were slowing up, while they cordially salute your victory with more waving and whistling. You soon lose sight and sound of them; the wind roars in the rigging; as the yacht sways in her course, her extreme speed makes her divergences appear like leaps from side to side—a mad, reeling motion. As she "rears," or heels over, she seems to rise for an actual flight into the heavens; she slides a little sidewise with a wild, tremulous motion, and you wonder where she will alight. Now she rears again, and at that moment you have to wear away to avoid some rough ice. The descent and the swing combined seemed to have destroyed the force of gravity; your body seems to have lost all material existence, and you swing through space with a rush that makes you shiver. You have been in the shadow of the clouds, but now, in a single instant, you fly into a sunny world, gleaming sharply, faintly, with prismatic hues: you are dashing through a windrow, the ice flies and the air seems filled with a shower of diamonds. Even while they fall you have crossed the sunny world and entered another of storms. The whole face of nature is animated; the hills grow up while you stare, and come rushing at you with a new and awful grandeur—a feeling of omnipotence. But they pass by, and subside again, as if by a magic spell. Suddenly something has happened; your feet have flown out from the plank and your body swings out by the arms as if whirling on a trapeze; the yacht has run over a mound of ice and snow a foot or more high; as this tossed her into the air, the wind on the quarter swung her stern around and headed her across the wind, straight for a high mass of broken ice. And she keeps right on, through all these gyrations, with such speed that you have to cling with all your might to prevent her from flying from under you. The captain, however, keeps his head, and in a moment wears her away again, with another of those inconceivable swings and sweeps of a bird. Her sudden starts and turns make her a living thing of the air, full of wild, swift, and graceful motions, and a wayward willfulness that is startling. Now she dodges a mound with the clear determination of certainty; then, in the midst of barriers that would crush us all, she sways and reels and roars as if in the confusion of inevitable destruction. But the spell of magic is upon her, and guides even her wildest flights. The horizontal or the upward tendency of every atom destroys again and again your sense of weight; your body seems the subject of unseen, unknown powers; and a keen, shivering glee flashes through your soul. Such a flight over the earth is among heroic feats, and it kindles your nature with the fire of valor. But the flight is done, and you must stop the triumph of the wing; you descend from the clouds of snow and the roaring storm

on which you flew as an eagle on a whirlwind; you return to the common earth, to the long, narrow valley of ice, dull and gray between its headlands, now flaming out in the cold, clear, silent evening.

Ice-yachting seems to be the acme of recklessness. In its early days, when the men were less skillful, and the yachts, being ill-balanced, were less manageable, accidents sometimes occurred. But now that experience has improved the methods of handling and building, ice-yachting may be called a safe sport. Serious accidents are almost unknown, and yachtsmen do not hesitate to sail with their families under reasonable conditions of ice and weather. The ice-yacht is the fastest object moving on the earth; but if any one find her motions too slow, let him put on skates, and holding one end of a long rope made fast to the boom, take a tow behind her on smooth ice; when she is under full speed put her about sharply, and give him a swing before he lets go the rope, as if from a sling. He will compare himself to a bullet.

of the curve,—somewhat as a whip-lash may turn very sharply without snapping. This gradual turning is very necessary in a stiff breeze; for if she be put about too suddenly her momentum causes her to slide sidewise, and to lose almost all her headway.

Pushing the yacht is the most prosaic experience. But it is often required in light, flawy wind and on a snowy surface where the friction is great, to prevent her from stopping and her runners from settling in the ice. Steering among obstructions and over rough ice or cracks requires much experience, coolness, and promptness. In going over a rough place, she is first headed so as to spill the wind and relieve her of strain; she is then headed as straight across a crack as possible, that the runners may not slip into it, and that they may both cross it at once. In going over broken ice where the cakes overlie one another, one or both runners must be run on the highest places to raise the plank above the obstructions. It is better to jump down from such high

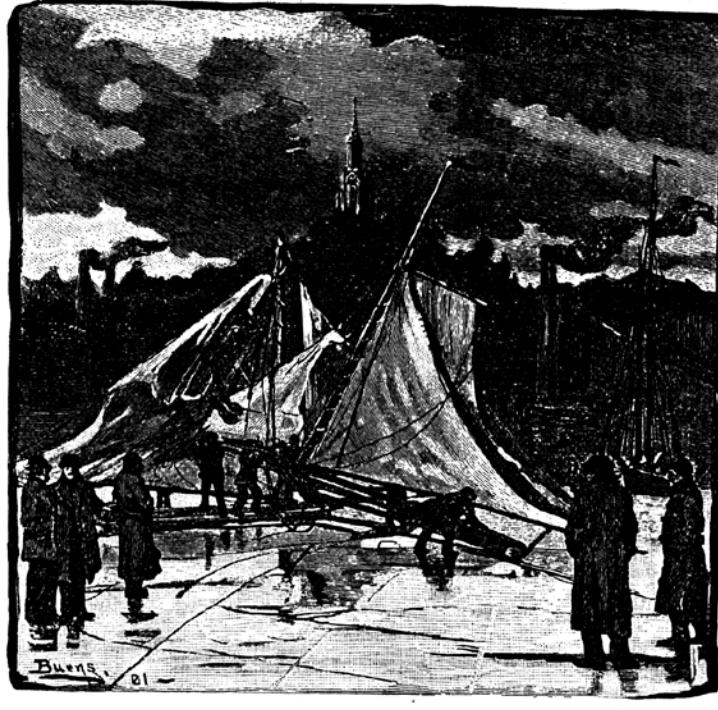


The handling of an ice-yacht differs from the sailing of other crafts in many particulars. Her sails are always trimmed flat aft; but if a wind on the beam is so strong as to make her either slide or "rear up" too much, the boom is sometimes let off a foot. The steering of an ice-yacht is very surprising to a water sailor. The tiller generally moves as easily as a straw, unless the rudder catches in a crack or runs through snow or rough ice. Her extreme quickness and delicacy in obeying the helm is one of her chief attractions; but the helmsman must have a cool head, a quick eye, and a steady hand. Otherwise she may whisk about with such sudden and erratic motions as to throw all hands into eternity. Nevertheless, she may be turned about with extraordinary quickness if she is brought gradually to the shortest part

mounds or cakes than to attempt to run up their steepest side; for, if the points of the runners catch on the edge of a cake or in a snow-bank, the yacht will be brought up so suddenly that her rigging may all go by the board, or the whole craft may be wrecked. In approaching dangerous places, it is sometimes necessary to stop very quickly. The usual mode of stopping is to luff her up and run her into the "wind's eye" till all her headway is lost. There are two modes of stopping quickly. When sailing close to the wind, luff her till her headway is diminished somewhat, and then turn the rudder quickly square across. This acts then as a brake, scraping sidewise on the ice. The strain on the boat, of course, is very great, and necessity alone justifies this maneuver. When sailing free, stopping suddenly is more difficult. Pay her off to

jibe, and as the boom, in swinging over, gives her a jerk, at exactly the same instant turn the helm quickly square across, pointing, of course, to leeward. This jerk hauls her stern suddenly around and she turns about into the wind, while the rudder is kept square across to act as a brake. If the speed be not very high, the yacht may be stopped in the space of two lengths by this maneuver. An ice-yacht is temporarily anchored by turning her head to the wind, lighting up the jib-sheet, and turning the rudder straight across. The jib-sheet should always be cast off, to prevent her from getting away alone. On one occasion, when the fleet had come to anchor in a cove and the men were loitering about the yachts, one yacht ran away. The jib-sheet was not cast off, and a gust of wind had started her alone on a wild and dangerous course. She first stood off from shore, but suddenly put about. She came straight in, and in a moment struck another yacht and made two complete wrecks, but fortunately did no other harm.

the box; but when a stiff breeze makes her slide around, more weight is required on the rudder to make it take hold of the ice. The best management of an ice-yacht can scarcely be described; it varies with different courses and must be learned by intelligent practice. In general terms, of course, her actions are like those of other sail-boats; but, in some particulars, her special features necessitate a different handling. She sails closer to the wind than any other craft; a good ice-yacht stands up within four points, and she goes about so quickly that she loses but little of her headway. In beating to leeward,—the ice-yachting expression for sailing with a free wind,—when she has her full speed, pay her off nearly on her true course for a little way; then should she begin to lose much of her headway, luff, or come up a little more to get up headway again. She is thus kept always at high speed, yet makes many short runs nearly on her true course. The higher the wind, the more she can run free. She always jibes on this course, and, if the wind favors,



An ice-yacht is got under way by trimming the jib-sheet and then swinging her stern around and pushing ahead till her sails fill. When she is temporarily laid up, all her runners are placed on pieces of board, the tiller is removed from the rudder-post, and her sails are protected by canvas covers.

The crew stand on the windward runner and hold on to the shrouds. This is the only proper position for them; for there they not only give their weight as ballast on the windward side, but also relieve the leeward runner of extra weight added to the pressure given by the sail. And, moreover, it is the safer side, since the spars, if carried away, cannot fall on them, and if she capsizes, they are not under the sails. In a light wind, only the helmsman lies in

makes a long turn. To "bring her to" at a given point while running free, reach a point many lengths directly to windward of it; then head her directly with the wind till she slows up to the same speed as the wind, turn her suddenly into the wind till she is nearly stopped, and then turn the rudder across as a brake.

(To Be Continued)

ATLANTIC COASTAL KAYAKER

2014
Our 24th Season

**Would you like to
read more, lots more,
about sea kayaking?**

**SUBSCRIBE
NOW!**

*Atlantic Coastal
Kayaker* will bring
you 36 pages monthly
all about sea kayaking,
8 times a year
(March through
December)

**All this
for only \$24
(8 issues)**

Like to see the next
issue? Just ask.

Subscription Order Form

Name: _____

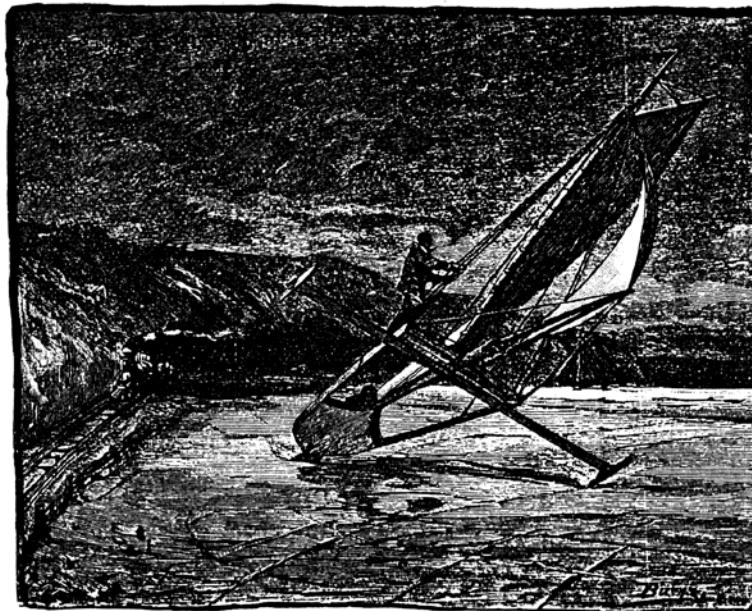
Address: _____

City: _____

State: _____ Zip: _____

Send check for \$24 payable to:

Atlantic Coastal Kayaker
P.O. Box 520,
Ipswich, MA 01938
(978) 356-6112
(Phone & Fax)
ackayak@comcast.net



STEAM AGAINST THE WIND.

ICE-YACHTING ON THE HUDSON.

An ice-yacht flits about like a swallow, skimming over the river with the speed and grace of a bird. She is better than a bird, for she takes you along in her flight and gives you the triumph of the wing, as she sweeps, and swings, and trembles on through space. Mount this wayward flyer as she is launched upon the wind. Your course is down the Hudson from Poughkeepsie, and, as your sail begins at a moderate speed, you can observe the scene.

The old river is not now in its human, sympathetic mood, when it hums with talk and song, and its banks are bright with lawns and flowers. It is a long, narrow, level valley of ice, all gray between its dark brown headlands. The hills are sober in a fur of bare trees, and the fields are bald and white with snow. As you look eighteen miles down the narrow valley, it seems walled in by high headlands marking a long perspective, down to where the Highlands close about it with a wall of hoary mountains. The pure, keen air gives even the distant scenes the clearness of a miniature. Here at the start are the shores of Poughkeepsie, with smoking furnaces, deserted docks, and sloops bound in the ice. Two miles below, on the right, is Blue Point—a high head of rock frowzy with bare trees. On the left are the cuts and tunnels of the railroad and the high cliffs, hung with gleaming icicles; and a train comes thundering into the wintry silence and veils the bluffs with steam and smoke. Farther on are the docks and houses at Milton nestled under the bank, and the Barnegat hills opposite covered with an olive-black forest of arbor-vitæ. On the right, the deep gorge of Marlborough veils its winter sculpture with golden willows, and the bold headlands of Hampton roll along the shore. Opposite these is the village of Newburgh. The valley expands still farther on into the broad bay of Newburgh, lying at the base of the Highlands. It is a long,

narrow stretch of cold and desolation. And yet, in gliding about, you get glimpses here and there of cheerful, active life. You may peep into fishermen's huts on the shore, where men are netting; or at a deserted mill tottering back under the rocks, while its perennial brook still sings and sparkles down the cliffs, now white with icicles and beds of frost-flowers. Your mind may linger about the farm-houses on the hills, where warmth and cheer fight off the winter cold and the biting breeze. It begins to blow more, and you find yourself flitting about from village to village with a quick and pleasant motion. Teams crossing at the ferries shy at you and hasten their pace. Gangs of men are working at the ice-harvest; fishermen are hauling their nets up through the ice or skating hastily toward little signals that respond to a "bite"; foot-passengers are gingerly picking their way on the slippery surface; groups of men and boys dot the ice with their black figures and reflect the sunbeams from their skates, and more retiring couples swing along, hand in hand, in the little bays and coves.



FISHING THROUGH THE ICE.

Ice Yachting 100 Years Ago

The fastest man made vehicles in the world just over 100 years ago, in the 1880's, were the big ice yachts popular on the Hudson River, with speeds we now know were in excess of 100 miles per hour possible under ideal conditions. "Scribner's Monthly" magazine of 1881 carried a lengthy article on sailing these craft, with a follow-up on how to build one. Thanks to a reader, we can bring you this look into the past when iceboats were very big and very fast, and a topic of great interest to the general public.

25 Years Ago in MAIB

These bits of life and color are doubly welcome in the desert of winter, cold, clear, and stern. The stillness of death is broken only by the loud cracking of the ice—utterings of the old river making a continual roar. You hear many sudden snaps, and the clear ring of thin sheets of ice falling in the "windrows"; then an angry crash from ice along the shore. The deepest tones are the loud, musical notes of a great crack that starts under your very feet and runs off to the bluffs.

All the large cracks run across the river. The lateral expansion finds room by crowding the ice upon the shores; but as the expansion up and down the river is prevented by bays and points, the ice buckles up in ridges across the river. Sometimes the bend goes downward and forms a hollow filled with water, until one side of the ice, dropping below the other, is caught by the tide, and broken off, and carried away. Such cracks often remain open all winter, for the water, boiling up from under the ice, is not easily frozen. In other cases, the bend goes upward and raises a ridge or bridge, sometimes several feet high; this does not interfere with travel until one-half drops down and makes a step or fault. The river is divided into long lanes and fields of smooth ice by windrows crossing in every direction. In some regions the windrows are so numerous as to prevent sailing; in others, large expanses offer good ice for long distances. When the first ice formed, it was so thin that it broke loose from the shores in large cakes or "fields"; these, in floating against one another, fractured the edges, turned them upward, and made ridges of broken ice, some of which are thin, clear sheets standing at every angle and flashing like mirrors. The yacht glides about in these fields and lanes, avoids the old mounds and windrows of snow-ice, and now and then dashes through a thin windrow, while the scales rattle and gleam like crashing glass.



Burns.

AN ICE-BOAT IN A SNOW SQUALL.

denly to avoid running her bowsprit against the man in the box of the head yacht. The by-stander on the ice is in more danger than the crew, unless he understand his rôle. When ice-yachts are darting about him, he should not lose his wits and attempt to dodge the fleetest thing that moves on the earth; he should stand still, that the yachtsmen may know where he is, and may avoid mowing off his legs with the runner-plank. One man, however, who found that the captain did not see him, had the presence of mind and agility to jump up at the critical moment and let the plank pass under him.

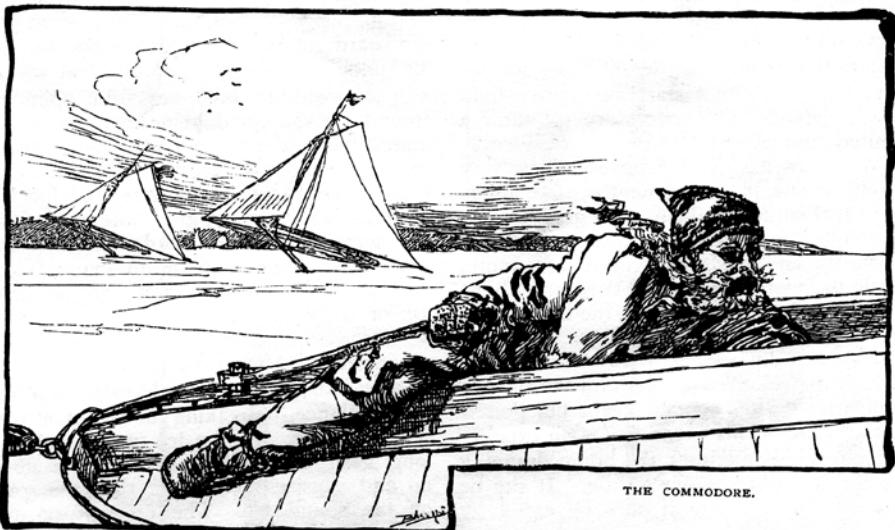
Ice-yachting, of course, has the disadvantage of a very short and uncertain season. The past winter afforded an unusual amount of sport,—about thirty-six days; but usually we enjoy perfect conditions of wind and ice on not more than sixteen days per year. We have, however, many other days of passable sport, when the enthusiastic sail, as well as they can, in spite of a few inches of light snow, rough ice, or light winds. The weather is never too cold for the ice-yachtsman, for the excitement and the motion help circulation. His suit includes arctics, a fur skull-cap covering the ears, linen drawers over woolen ones, a calf-skin coat, or else cardigans, under a warm pea-jacket. The trowsers are tied about the ankle or tucked into the legs of woolen hose. When sailing in a driving storm, fine wire goggles are sometimes worn, or a wire covering

for the mouth. But after securing even the best protection, you may some time have to study the best treatment of frosted parts.

The speed of an ice-yacht seems incredible, for a literal statement of it is the paradox that she sails faster than the wind driving her. This interesting problem lately brought to print many letters from diverse sources. The people inquired about the facts and their explanation. Some professors of science explained why the speed of a yacht could not equal the velocity of the wind. Ice-yachtsmen replied by

giving the recorded speed of their yachts as a mile a minute in a stiff breeze blowing at about twenty miles an hour. Then the professors reconsidered the problem, and sought for an explanation of the fact. Some of the contributors give long equations to demonstrate the relations between the rate of the wind, the amount of friction, and the speed of the yacht. One of the most elaborate studies—in *Van Nostrand's "Engineering Monthly"* of December, 1879, and January, 1880—shows that the yacht tacking before the wind goes a little more than twice as fast as the wind. This estimate seems, however, below the facts. But as the average reader prefers a more popular explanation than $x = y$, it is better to present here some of the most evident facts and principles connected with an ice-yacht's motion.

First. An ice-yacht meets with very little friction in moving on ice—less than that met in the very best mechanical appliances. The runners move on the ice with such ease that a yacht weighing eight hundred and sixty pounds can be kept moving with two strands of common cotton wrapping-cord. Moreover, in even the greatest velocity, the little heat generated by the friction is absorbed at once by the ice. Hence, so far as the running friction is concerned, she might run, perhaps, a thousand miles an hour, without much increase in the force of the driving power. *Second.* She never loses any of the effective power of the wind, or the sail-push, by making leeway. For the runners hold her from any side-motion, and allow her to move only forward or backward—unless, of course, when the wind is so strong as to heel her over or make her slide. *Third.* She meets the most resistance in the air-friction; that is, when beating to windward, or sailing in such a direction that the sails and other surfaces receive the wind from ahead. *Fourth.* Her great speed changes the effective direction of the wind or the sail-push; for, if the wind blow twenty miles an hour from the north, and if the yacht sail twenty miles an hour to the west, the wind will strike her on the starboard bow, as if it came from the north-west. *Fifth.* Hence she cannot sail with the wind without running ahead of it during the lulls, and thus not only



THE COMMODORE.

meeting air-friction from a wind apparently ahead, but also losing the force of the wind on her sails. In this direction, she cannot go much faster than the wind; it is her worst course. A wind on the beam is much better, for in this course, in going at right angles to the wind, she loses none of its force by her own speed; she cuts across it, but does not go with it. However, she meets some air-friction, which diminishes her velocity.

The practical results of these peculiarities are, that she never swings off the boom, but always trims her sails flat aft, and always beats to leeward, as well as to windward. It is easily foreseen that she will make the greatest speed on that course in which she meets with the least air-friction, receives the strongest push of the wind in a forward direction, and yet does not lose the wind too much by her own speed. This course is running free, with the wind on the quarter, or about one hundred and thirty-five degrees off her course. Suppose the boat heads north-east, while the wind blows from the west. Now, her speed diagonally across the wind causes her to receive the wind on the beam, as if it blew from the north-west. She practically has a wind on the beam; this offers but little air-friction against her forward motion. The running-friction is so slight that the boat keeps her way; the direction of the sail-push is sufficiently forward to be advantageous; and, lastly, her diagonal course, partly with and partly across the wind, saves her from losing too much of the wind's force by her own speed. Suppose that a twenty-knot breeze blows from B to C, and that she heads toward D; while the wind, represented by the arrow A, blows in a given time to C, it carries the boat with it, in nearly the same time. But, as she heads diagonally across the wind, she is obliged to run the long distance from B to D, while the wind blows only from B to C. She therefore beats the wind. Her wonderful freedom from running-friction is the important element in the problem. Her speed is limited only by the loss or change of the wind through the effects of her own velocity. The greatest velocity of an ice-yacht is not recorded, because her finest runs occur either at unexpected moments, or when she sails over unmeasured distances. But the time over short and long courses has often been taken. The distance from New Hamburg to Poughkeepsie is over seven miles. The *Snow-Flake* ran this course in seven minutes. This is the quickest time on record; but many winters the trip has been made in from nine to ten minutes. This speed is attained

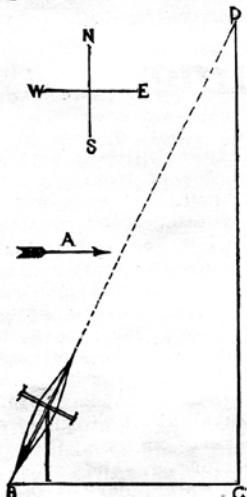
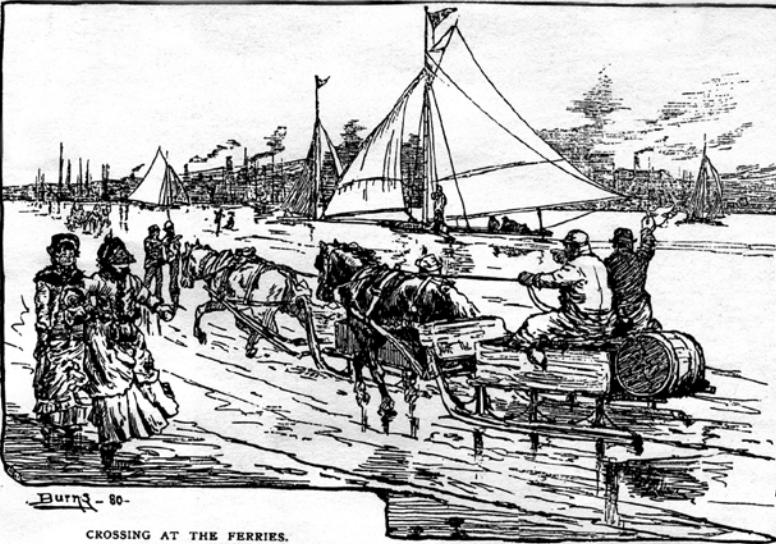


DIAGRAM ILLUSTRATING THE SPEED OF AN ICE-YACHT.



CROSSING AT THE FERRIES.

with a stiff breeze on the beam or on the quarter, and when the ice is tolerably smooth and clear of impassable cracks. But an ice-yacht very seldom runs a straight course for even a mile. Various obstructions have to be avoided; the wind changes direction very often, and also comes and goes in fitful puffs over the hills. The consequence is that she makes a very crooked course at

very uneven speed; she goes more than seven miles, and sails at her full speed during much less than seven minutes. Probably she flies at times from eighty to one hundred miles an hour. The speed of an ice-yacht, in working to windward, which is her poorest course, is from ten to fifteen miles an hour, against an eight to ten knot breeze.

Reprinted from "Scribner's Monthly", 1881.



MAAS ROWING SHELLS
AB INFLATABLES
TRINKA 8, 10 & 12 DINGHIES
HONDA OUTBOARDS
THULE RACKS
ROWING INSTRUCTION
55 Spicer Ave., Noank, CT 06340
(860) 536-6930



info: 860-535-0077 www.dons-dock.com
228 North Water Street, Stonington, CT

By-The-Sea

www.by-the-sea.com

- Boat Dealers
- Boat Builders
- Marinas
- Boats For Sale
- Nautical Books
- Plans and Kits
- Weather Instruments
- Free Classified

Tel 508-240-2533 Fax 508-240-2677 Email: info@by-the-sea.com

Recently a friend who had just finished building a new boat asked for some advice about how to get started camp cruising. As I began to assemble some notes it occurred to me that I was really putting together a shopping list. So I decided to share this with other enthusiasts who may want to expand beyond day sailing.

What is camp cruising? The essence of this experience is that we spend one or more days sailing or motoring while living aboard the boat. This includes having provisions for cooking, sleeping and tending nature's call. Some people, especially those with paddle or rowing craft, spend their nights ashore. I think of this approach as "beach cruising." It would be an interesting topic for a follow up article if any readers are so inclined.

What do we really need? Have you ever wandered around a sales lot for recreational vehicles? If so, you may have noticed that they offer choices from a simple "box on wheels" to a rolling home away from home. Camp cruising can be that way, too. We can start enjoying this hobby with a small investment of money and a minimum amount of gear. The requirements are basic, food and water, shelter, bedding and a sanitary way to deal with human waste. If we become enthusiasts we can add refinements to how we approach these needs and choose a level that suits our budget and lifestyle expectations.

Meals

Some of you may smile at my choice of priorities, but let's begin with food. We're going to be aboard the boat for at least two days and one night. How should we handle meals? The simplest approach is to bring along meals that need no preparation. This could be sandwiches, granola bars, fruit and a jug of water. We could choose to carry MRE (meal ready to eat) packages, which are widely available from military surplus or camping supply stores. Some of the MREs are self heating by way of a chemical reaction when we open the container. I enjoy having variety in my meals and I prefer hot food for breakfast and dinner. So I carry coffee and tea, instant oatmeal, raisins, fruit cups and juice boxes for breakfast. For lunch I prepare a sandwich.

Some camp cruisers use tortillas instead of bread as they take up less room and a rolled up sandwich is easy to eat with one hand while steering the boat with the other. I understand the advantages of tortillas but I prefer to bring a loaf of artisan multigrain bread from the local bakery. I carry cheese, cold cuts and a squirt bottle of mustard. Pringles™ potato chips are tasty and the tube container prevents them from getting crushed.

I like a hot dinner, so I carry canned soup or stew, pasta, rice or couscous, canned vegetables, salt and pepper. I also bring some kind of precooked chicken or meat to mix with the starch and veggies to make a hearty one pot meal. My current favorite camping dinner is couscous mixed with peas and chunks of precooked chicken breast. It takes about 15 minutes to prepare.

How to heat the breakfast and dinner? We need a cooking pot and a portable stove. If we don't have camping cookware, we can start by just bringing a mid sized sauce pan with a lid from home. That will meet most of our camp cruising needs. There are three commonly available types of camp stove. These are solid fuel, liquid fuel or gas cartridge. The solid fuel approach is not well

Setting Up a Small Boat for Camp Cruising

By Doug Oeller



We may prefer the additional shelter of a full tent that can be closed at the bow and stern of the boat. There are two approaches to tents on boats. The simplest is a boom tent, which uses the boom as a ridgeline support and attaches in some way to the sides of the boat. There are many variations on this theme because we need to customize the tent to fit the boat. One drawback to a boom tent (or a simple rain fly) is that we don't get much headroom.

The way to get more headroom is to advance in complexity and use a self supporting tent with flexible poles. We can choose a camping tent and cut the floor out. Or we can buy a tent designed for use in a pickup truck. Either approach can work well. But both require more room to store, take more time to set up, and can be a bit confusing to figure out in the dark when we are tired. When I started camp cruising I bought a nice Conestoga wagon type truck tent. It provided good shelter and ample headroom. But as noted, I found it too complex to set up. Another disadvantage was that it created a lot of sail area and my boat tended to veer from side to side on the anchor line all night long if there was any wind. Sometimes simple is best.

Sleeping Pad and Bag

OK, now we have some shelter over our head and it is time to roll out the sleeping pad and bag. There are far too many choices in sleeping gear for me to address in this article. So let's focus on the concept instead. Camp cruising is supposed to be a pleasant experience. Being cold at night can take all of the joy out of camping. So if we don't already own a good quality sleeping bag, we spend a bit extra to get one. In general, good quality camping gear will last a lifetime and is well worth the extra cost. Remember that down bags may not be the best choice for use in a damp environment. If we are buying new, we should choose a bag with synthetic fill.

Because I camp cruise for three seasons of the year, I experience a wide variety of night time temperatures. I deal with this by carrying two sleeping bags. One is a light-weight synthetic fleece bag. The other is a cold weather bag. Depending on conditions I sleep on top of one bag and in or under the other. In very cold weather I use the fleece bag as a liner for the cold weather bag.

We also need some kind of pad or mattress. There are many choices available. In

2001 I went on a whitewater rafting trip in Utah with my friend Joe. He had a fully outfitted raft. So all I had to bring was my sleeping gear and clothing. I didn't have a sleeping pad and I asked Joe what he used. Joe said, "You need a Paco Pad. I'll pick up one for you and you can reimburse me." The Paco Pad, from Jack's Plastic Welding, is a vinyl covered thick foam pad with air channels that self inflate when you unroll the pad. I experienced a bit of sticker shock when I learned the price (about \$150 back then). But that was assuaged after one night of using the pad. Until that time I had never slept comfortably while camping. Since then, I only use the Paco Pad. It has held up perfectly and still looks new.

The final item for getting a good night's sleep is a comfortable pillow. Forget about using a tiny camp pillow or laying your head on folded clothing. Pillows are easy to stow in a boat. Bring the one that you use at home. Carry it in a dry bag. Sleep well.

Human Waste Management

This camp cruising adventure is off to a good start. We had a nice day of boating followed by a simple but tasty warm meal and then snuggled for a comfortable night's rest sheltered from the wind or dew and warm inside our sleeping bag. It feels so good in there that we hate to get up in the morning and deal with nature's call. But some things just cannot be ignored forever. From an environmental impact perspective, it is acceptable to urinate into a river, creek or tidal waters because urine is normally sterile. Obviously, if we are anchored near houses a little discretion is called for. We wouldn't pee on the curb in front of our neighbor's house.

So we don't stand up and pee over the side of our boat in someone else's neighborhood. We use some type of urinal that can easily empty and rinse out. There are commercial devices available. A simple bucket also works well. But my preferred device is a plastic bailer because it also works well as, wait for it, a bailer! I would be remiss if I did not mention the option of using a "genital cabana." This is an elegant device that I believe was invented by our good friend, Capt. Pete. The cabana is made by cutting a hole in the top portion of one side of a quart milk jug. We hold the jug upright at the required height and location, relieve ourself into the container and then dump the contents overboard.

There are several companies now marketing funnel devices that, when held in the appropriate location, allow a person of the female persuasion to pee standing up. The funnel directs the stream downward and forward and allows one to aim. I'll give a nod to GoGirl™ for having the best product name and the catchiest marketing slogan, "Don't take life sitting down." Oh, you reluctant lady campers, think of what fun you could be having!

Disposal of solid human waste requires a different approach. It is not OK to use the historic "bucket and chuck it" approach. Human waste can contain disease causing organisms and is most decidedly not sterile. It is illegal to discharge untreated human waste within 12 nautical miles of land. So camp cruisers should have a containment system. We could carry a portable toilet but these generally take up too much space to be used in the small boats that give us access to the most interesting waters for camp cruising. The best solution that I have found is to use a system com-

prising a biodegradable plastic bag and some type of dry material to absorb moisture and eliminate odors.

In essence, what we need is a seagoing litter box. We can find these products at camping supply stores. The one that I prefer is the WAG BAG® go anywhere toilet kit. The kit contains a waste bag, zip close storage bag, toilet paper and hand sanitizer. The waste bag contains "Poo Powder™ that quickly turns human waste into a solid for easy transport and safe disposal. The powder is an odor neutralizer and a decay catalyst that initiates decomposition. We can dispose of the used system in any trash receptacle when we reach shore.

A few words of caution are in order here. This is a single use device. We do not want to be reopening a used bag to "have a second go." So we bring along more than we expect to need. Also, the odor neutralization may not be total. If we are planning a multi-day trip we may want to store the used bags in a bucket that can be hung off the stern of our boat at night when we are enclosed in our shelter. We should never store a used bag under the floorboards near where our head will be while sleeping. And never mind how I know that.

Miscellaneous Extras

To enjoy a cold beverage and niceties like real milk and butter while camping we need to carry a cooler. The best size to take depends on how much space we have to stow the cooler. Based on my experience, we will tend to fill whatever size cooler we have. More room beckons for more provisions, even if the trip will be short. This adds a lot of weight in the boat. But it also allows us to be a good host when sailing with a group. Rather than putting ice in the cooler, put the ice in sealed containers first. That way our food doesn't get soggy. And when the ice melts, we can drink the water. One simple approach is to simply buy some bottled water, freeze it, and use the frozen bottles instead of ice cubes.

We'll want some kind of lantern. There are many compact LED camping lanterns on the market. Bring two little ones. We can use one for an anchor light or as a backup if the first one stops working. I am very pleased with the Mini Lighthouse Lantern available from LL Bean at a cost of \$29.95. Yes, I know you can find less expensive lanterns. But these are a perfect size and of high quality.

I know this sounds excessive but consider investing in a camp table. It makes dining aboard an open boat a much more pleasant and civilized experience. Camp tables are designed to be rolled or folded for easy storage. The one that I use is the 18" Base Camp Side Table, also from LL Bean. What I like about this table is that it is a perfect height to straddle the centerboard trunk of my boat. Having the table there gives me a flat food preparation surface near the stove. I place my stove on the cockpit floor where it is sheltered from the wind while cooking. Once the meal is cooked, I stow the stove and shift the table to the cockpit area for dining.

Conclusion

We can get started camp cruising with a minimal investment in new gear. If we have done some car camping, we probably already own most of what we need. Go out, give it a try and figure out over time what else, if anything, we need. If we become enthusiasts, we can choose suitable products designed

for backpacking and river rafting. Most will work well on a boat.

A good way to learn is camp cruising in company with other more experienced people at first. We small craft enthusiasts are often innovative people. And we like to share and compare ideas. I learned most of what I know about this kind of camping from Pete Peters, Kevin Brennan and Mike Wick. Gentlemen, thanks for the lessons and for introducing me to what has become my favorite pastime.

Supplies

Butane Stove: Prices range from \$20 to over \$100. The more expensive stoves are made of stainless steel. I use one made by Iwatani. In hindsight I would recommend buying the least expensive one. They perform just as well. Butane refill canisters can be ordered from catering supply houses. Near an Asian supermarket, stoves and refills can be found. Target department stores sell a Coleman brand butane stove for under \$20.

<http://www.target.com/>

Rain Fly: My rain fly comes from Eagles Nest Outfitters. They sell a nice variety of lightweight tarps intended to cover hammocks. The prices range from \$80 to \$140.

<https://www.eaglesnestoutfittersinc.com/>

Sleeping Bag: Sports Authority sells the Coleman Stratus Fleece Sleeping Bag for \$15. I recommend this for summer camping and as a liner to put inside a heavier bag for cold weather camping.

<http://www.sportsauthority.com/home/index.jsp>

Sleeping Pad: Jack's Plastic Welding sells the Paco Pad for \$191. They also sell commercial quality dry bags.

<http://www.jpwinc.com/index.html>

Waterless Toilet System: My preferred product is the Cleanwaste WAG BAG Toilet in a Bag Waste Kit available from REI for \$2.95 each. Sometimes lower prices can be found by the dozen.

<http://www.rei.com/>

Female Urination Funnel: OK, no personal experience here, but the marketing for GoGirl™ makes it sound like a well designed and high quality product. The funnel sells for \$12.99 and is available in pink or camo color. No, I don't know the need for a camouflaged funnel either.

<http://www.go-girl.com/>

Lantern: My current favorite is the Mini Lighthouse Lantern, available from LL Bean for \$29.95.

<http://www.llbean.com/llb/shop/31?nav=gnro-sr>

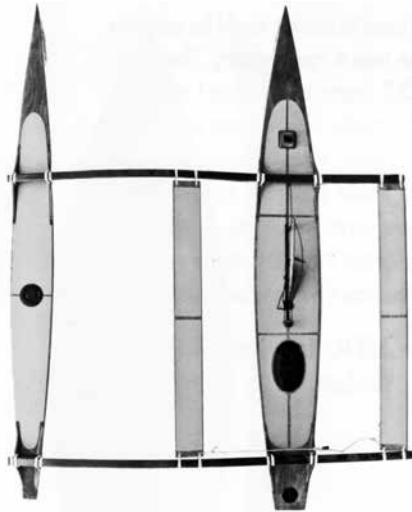
Camp Table: Choose one that will stow easily in the space available. The 18" Base Camp Side Table, available from LL Bean for \$39.95, is a convenient height and of good quality.

<http://www.llbean.com/llb/shop/31?nav=gnro-sr>





Outrigger Junior CLC BOATS.COM



If there's a guiding principal behind John C. Harris' energetically whimsical designs, it's "Small boats are the most fun for the least money." Fast is fun, too, and amply demonstrated by the new Outrigger Junior.

Designed in 2003 for a proposed youth sail training program that never jelled, Harris kept the original design name but tinkered with the lines for more than a decade before perfecting the concept and launching the first prototypes in 2013. "The result," he says, "is like catnip." Docile to handle yet blazing fast, the Outrigger Junior is outrageously good fun on the water.

The Outrigger Junior is best described as a "Tahitian Outrigger," which is to say a finely proportioned sailing canoe that's asymmetrical but tacks conventionally. The famous Malibu Outrigger of the 1950s and 1960s also gets a nod here, though the Outrigger Junior is a much more sophisticated boat.

The outrigger layout enjoys many advantages in weight and engineering. It's



less work to build and less weight than a catamaran of the same size and payload, yet the righting moment is higher. This means more speed for less money. Lots and lots and lots of speed. Providing the motive force is a lateen sail of 165sf. A big sail, sure, but with a low center of effort and simpler, cheaper hardware compared to the more common jib headed sloop. Speeds will mount well into the teens with the right crew and conditions.

Even with the outrigger layout's economy, there's quite a bit of boat to build and we've made it as easy as we can with a really tight fitting kit or full sized plans. We offer several separate packages, hulls, rig, etc, that plans or kit builders can purchase in any combination to suit their budget.

Count on about 200 hours to put one of these together, followed by endless curiosity, admiration, and jealousy at the beach.



PIRACY

Seven Indian sailors were ransomed after four years of Somali captivity for an undisclosed sum of money. With the increase of international patrols, piracy in the Indian Ocean has decreased sharply. Although many warships sail Eastern Africa and Asian waters, the individual sailor is responsible for the welfare of his/her boat and crew.

The United Nations Security Council passed formal resolutions condemning piracy, especially around the horn of Africa and the African Eastern seaboard. The UN authorized international patrols in highly dangerous areas. NATO, the European Union, the US, Russia, China, Japan, Korea and several other countries provide patrol vessels. The increased protection for merchant ships has greatly reduced the taking of entire ships, however, the UN spokesman warned that 37 people are still held captive in Somalia.

The seven teams participating in the Volvo sailing race around the world have been assured that they will be safe from attack on the South Africa to Abu Dhabi leg of their voyage. Volvo oceanic officials have expressed confidence in the yachts' safety in spite of expressions of serious concerns in previous years.

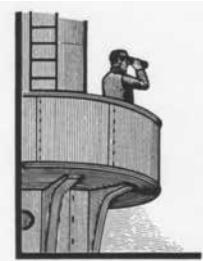
CHINA

The Office of Ocean and Polar Affairs, Bureau of Oceans and International Environmental and Scientific Affairs in the State Department issued a highly documented study on China's definition of Limits of Continental Shelf jurisdiction that aroused immediate Vietnamese, Indonesian and Philippine objections. China claims that many islands in the South China Sea are under their sovereignty predicated on a 1947 map that in turn was based on a 1935 map printed by the National Chinese. The government of the People's Republic of China designed the 1947 map.

The Chinese Government communicated two "Notes Verbales" to the UN Secretary General requesting that they be circulated to all UN Member States stating its position on control of islands within an area on their map: (1) The Paracel Islands (referred to by China as Xisha Qundao), (2) the Spratly Islands (Nansha Qundao) and (3) Scarborough Reef (Huangyan Dao). The largest of these islands is Woody Island in the Paracel Islands. Their claim also encompasses numerous submerged features such as Macclesfield Bank (Zhongsha Qundao) and James Shoal (Zengmu Ansha). This are amounts to over 2 million square nautical miles.

The Chinese claimed that a Vietnamese ship intentionally collided with a Chinese merchant ship and demanded that all Vietnamese vessels depart from the South China Seas that China claims as their territory (see above). The smaller nation counter claimed that China collided with eight of their ships and water cannoned others. They have filed UN complaints that China has a huge drilling rig in Vietnamese waters. China anchored 80 merchant and Navy ships around the oil rig causing significant navigation issues.

Taiwan wants to purchase two Oliver Hazard Perry frigates from the United States as elements of a four ship deal amounting to over \$6 billion. Of course, the Chinese government immediately objected to this plan and condemned any foreign sales of arms to Taiwan because China has laid claim to this island since 1947. In 2010 a similar deal



Beyond the Horizon

By Stephen D.
(Doc) Regan

caused the breakup of military to military meetings between the China and the US.

Taiwan announced that it would build its own diesel powered attack submarines because the promised US boats have not been delivered. The administrations of Bill Clinton, George W. Bush and President Barak Obama have all stalled the actual building the ships per an agreement 15 years ago. The US has not commented on its renegeing on the agreement, but the Taiwanese patience has run out.

The West's economic sanctions for the Russian incursion into the Crimea have halted the delivery of two Mistral class amphibious warships to Russia. The French President Francois Hollande halted the \$1.56 billion deal. Russia claimed breach of contract and is suing France.

HISTORY

The Navy Goat seems like an unusual mascot for mariners but the relationship between goat and sailor is a long tradition (keep it clean, Army). Goats were carried on ships since the earliest days of oceanic travel for several reasons. They provided milk and meat that were important elements of diet other than salt beef and biscuits. Goats are very sure footed and can handle the ship's movements while cows end up like loose cannons flying all over the ship. As an Iowa boy I learned long ago that cows go where cows want to go and being hit by a cow is no small bump.

Goats do not need any specific diet, in fact they will eat anything, thus, they were wonderful garbage disposals. Being small, they did not take up much room on board. In the US Navy many animals became ship pets including the ever present dogs, an occasional cat and a lot of goats. Sometimes goats were left on islands as possible sources of food and milk for shipwreck survivors.

The Goats from the Naval Academy have bested the Army Mule on the gridiron for 13 years in a row. My Army friends tell me it's ass kicking time next year.

RESEARCH

A research team in the UK studied collisions around the world and concluded that 85% of all watery fender benders were due to human error. This study supports Turkey's findings, however their findings reduced the human error to about 80%. Both studies noted that captains often failed to obey international regulations because of faulty education and training. Other studies indicated that training programs left many captains little knowledge about collision avoidance, rules of the road and inadequate training on the use of navigation equipment. They also indicated that most nations fail to enforce laws and regulations because of limited fiscal support for such endeavors. Some captains even do not know how to read charts.

The Port of Virginia directly or indi-

rectly produces over \$60.3 billion for the area's economy. Over 374,000 people are employed because of the maritime operations in Virginia according to a study recently completed by the College of William and Mary.

ACCIDENTS

MV Versace Amara, with 20 European cruise passengers, struck a reef and sank off uninhabited islands near Indonesia. Two were missing as the crew and passengers were picked up after two harrowing days at sea. Some claimed that the boat had no radio, charts nor adequate number of life jackets. Thirteen people were not rescued from the water for two days.

A Hornblower Cruises cruise ship ran aground near the shore of Thomas F. Regan Beach in South Lake Tahoe, California, with nearly 300 passengers aboard. The paddle wheeler struck land in an area known for shallow water. The Coast Guard rescued all guests in less than four hours but several crew remained on board.

A Greek ferry caught fire in the Adriatic Sea in December 2014. A passing cargo ship rescued 49 people but 160 were stuck on board the ferry as Italian Coast Guard ships were attempting a rescue. At least ten people were killed. The disaster started as a car fire on the car deck, forcing passengers to huddle on upper decks in spite of rain and hail and thick smoke. As late January 1, 2015, a passenger list had not been proffered nor a number of passengers noted. Best guess is that at least 95 have not been found.

LAWYERS

The cruise ship business has so many misfortunes ranging from groundings to sinkings to say nothing of fires, novo virus cases, losing people and personal injuries that a new breed of specialty attorneys has emerged, the Cruise Ship Accident Law. Miami has sprouted many cruise ship accident firms that concentrate only on the accidents aboard the White Fleet. One newspaper ad notes that they deal with the following; passenger accidents, crew member injuries, crime at sea, rape and molestation, assaults, missing persons, wrongful death, excursion accidents, criminal act by crew. Obviously, cruise ship reservations have taken a big hit and now companies face years long battles in courts.

BIG RIVER NEWS

The DNR of Minnesota is making a major attack on aquatic invasive species. All boaters in Minnesota must take an online course on the prevention of unwanted flora and fauna AND have the required decal on the motor. NOTE: Those boats without motors (sailboats) must post the decal on their trailers. Canoes and kayaks are NOT exempt from this mandate. This applies to every boat and trailer that even passes through Minnesota and never is launched. Tourists and travelers need to be aware of this new law or carry plenty of money with them as they pass through the state on the way from South Dakota to Wisconsin or heading to Canada for fishing. Further information on the course and obtaining the decal (plus costs!) can be found on the Minnesota DNR website. Check out <http://www.trailers.mndnr.gov/>.

The *Mary K Cavarra* pushed four barges through Lock and Dam #2 on November 20, 2014, at Hastings, Minnesota, as the ice crowded behind her marking the earliest closing of the shipping season on the Mis-

sissippi in nearly 50 years. Thick ice at Lake Pepin and iced in barges at Guttenberg, Iowa, effectively closed the Upper River until spring. In spite of the late spring and early winter of 2014, shipping increased 10% over the previous year.

Those miserable Asian carp that have inundated the Midwest forced the Army Corps of Engineers to create yet another barrier to protect the Great Lakes. Installed on the Des Plaines River downstream from the Joliet Dam and the Chicago Sanitation and Shipping Canal, this barrier is a high tech attempt to keep the carp contained at a cost of \$25 million. The Army COE is developing plans to secure Lake Michigan from the Illinois River with a program that comes at a vertigo making cost of \$25 billion.

The carp has few, if any, natural predators and possesses a voracious appetite for natural aquatic plant growth and small fish, creating a massive ecological trauma to the rivers and waterways. Jumping high out of the water when spooked, these carp have become the target of boaters who race between two points with one person holding a net. The winner is the person who captures the most flying carp. Videos of these fish are interesting and funny but also show how invasive they have become. DNR in many states are especially worried about their spread especially when thoughtless people toss these problem fish into lakes and ponds.

MR GO

As if the Army COE didn't have enough problems, it is being sued for not maintaining the Mississippi River Gulf Outlet (MR GO). Originally built as a canal from the Gulf of Mexico to New Orleans allowing ships to have a straight path to the Crescent

City rather than meander through the islands and shallows of the river mouth, MR GO has eroded banks and allowed salt water to assault precious wetlands.

The Corps of Engineers claim that they are immune from liability under the Flood Control Act of 1928, furthermore, they claim the responsibility for the canal lies with the state of Louisiana that counters they won't pay and filed a \$3 billion suit. The state further claims that MR GO neglect caused a great deal of Hurricane Katrina's damage. Again, the sundry lawyers are drooling.

NEW TECHNOLOGY

A new liquefied natural gas propelled towboat design created by the Shearer Group has been "approved in principle" by the American Bureau of Shipping. Using LNG and additional technologies including Z drives and Wartsila dual fuel engines, these towboats will drop fuel costs by an estimated 35%.

For those of us who are ignorant, Z drive is an azimuth thruster that turns 360° thus eliminating a heavy rudder. This form of power transmission is called a Z drive because the rotary motion has to make two right angle turns, thus resembling the letter "Z." This name is used to differentiate the arrangement of drive to that of the L drive. Whatever.

It's about time
Join Us
Kayaksailor.com
Kuvia llc PO Box 1470 Hood River, OR 97031 Ph 541.716.6262

Wooden Canoe Heritage Association
35th Anniversary
WOODEN CANOE HERITAGE
ASSOCIATION
1979-2014
Join the Wooden Canoe Heritage Association today and receive six issues of *Wooden Canoe*, the full-color journal of the WCHA. Other benefits of membership include local and national events throughout Canada and the United States, on-line research and repair help, and wooden canoe-themed merchandise.
www.WCHA.org
603-323-8992

Come aboard!



The Traditional Small Craft Association, Inc. (TSCA) works to preserve traditions, skills and lore of small work or pleasure boats developed in the days before internal combustion engines.

Join a growing crew of small boat enthusiasts who paddle, row, pole, or sail some of the finest watercraft ever created.

Contact your nearest TSCA chapter (nearly 30 are listed on our website). Find out how

to connect with like-minded souls, or form your own group, and enjoy the thrill of "simply messing about" in boats.

Enjoy our quarterly, *The Ash Breeze*, and stay abreast of boatyard, backyard, and on-the-water activities.

Membership starts at \$20. Sign on, today.



Phil Bolger knew design and construction completely. But he wisely left little construction details to other lesser mortals because the builder usually used some of his own methods anyway. Phil, whenever possible, spent his valuable time on the big concepts where his brilliance showed. He did admit to any shortcomings to guide us down the path of success.

One such little detail which Bolger left for others was how to cover the walk through opening on the top of his Birdwatcher. The Birdwatcher concept is a huge improvement for small boats. The concept is appreciated if you've ever made your way forward, trusting to anti slip deck, grab rails, coaming and life line. And then fought that halyard, jib or anchor without slipping over the side. In a small boat, walking down the deck might involve a mandatory Eskimo roll.

So a lesser mortal, yours truly, will give the missing cover a try, to be improved on by other *MAIB* readers.

Different Cover Methods

A canvas Bimini forward, extended aft with portable pvc pipe or fiberglass hoops set in sockets, would involve snaps and zippers for access forward and aft. See Loon and others in *MAIB* for a successful installation.

A long, rigid hinged lid or cover which drops to one side, must be held with a catch (hook) which holds it in either the open or closed position. With coaming and gaskets it could easily be made watertight. However, many things hinged on a boat can lead to crushed fingers. So a rigid but light frame of aluminum, wood or fiberglass with canvas or plastic cover, might bruise fingers, but not crush.

If the cover slides laterally into a "garage," this long and narrow shape will jam.

Birdwatcher Covers

By Jim Wonnell

Double handles would help, but cords forward and aft, led through blocks, would probably be needed to be pulled to clear jams.

A lid which rises vertically, with canvas sides, involves vertical tubes with cables and jacks or winches, scissor bars or bars which slide horizontally in tracks. Bring your penetrating oil. The pop top on 24' Catalinas and Ventures apparently worked well. These were over a large companionway, maybe 3' square.

Mechanisms for raised roofs for van camper conversions can be seen online at websites like camperize.com or Wikipedia. Some of these mechanisms would need to be massive to not bend out of shape in a wind, which could ruin your cruise. The most wild of these camper tops blossom in different directions for queen sized beds, outside entry, etc. Wind gusts might cause capsize on a small boat if the opened top was very large, even for a multihull. Worth looking at for ideas is the tiny motorcycle trailer which spreads into a large tent.

In case of rain or spray, quick opening and closing would be desirable to minimize the amount of water getting below. A fast mechanism without problems exists. We used a top with such a mechanism which raised or lowered in five seconds, with no problems. It was on a Ford Econoline camper (see photo) we rented to go to the Montreal Expo. It was made by the Calthorpe company in Elkhart, Indiana.

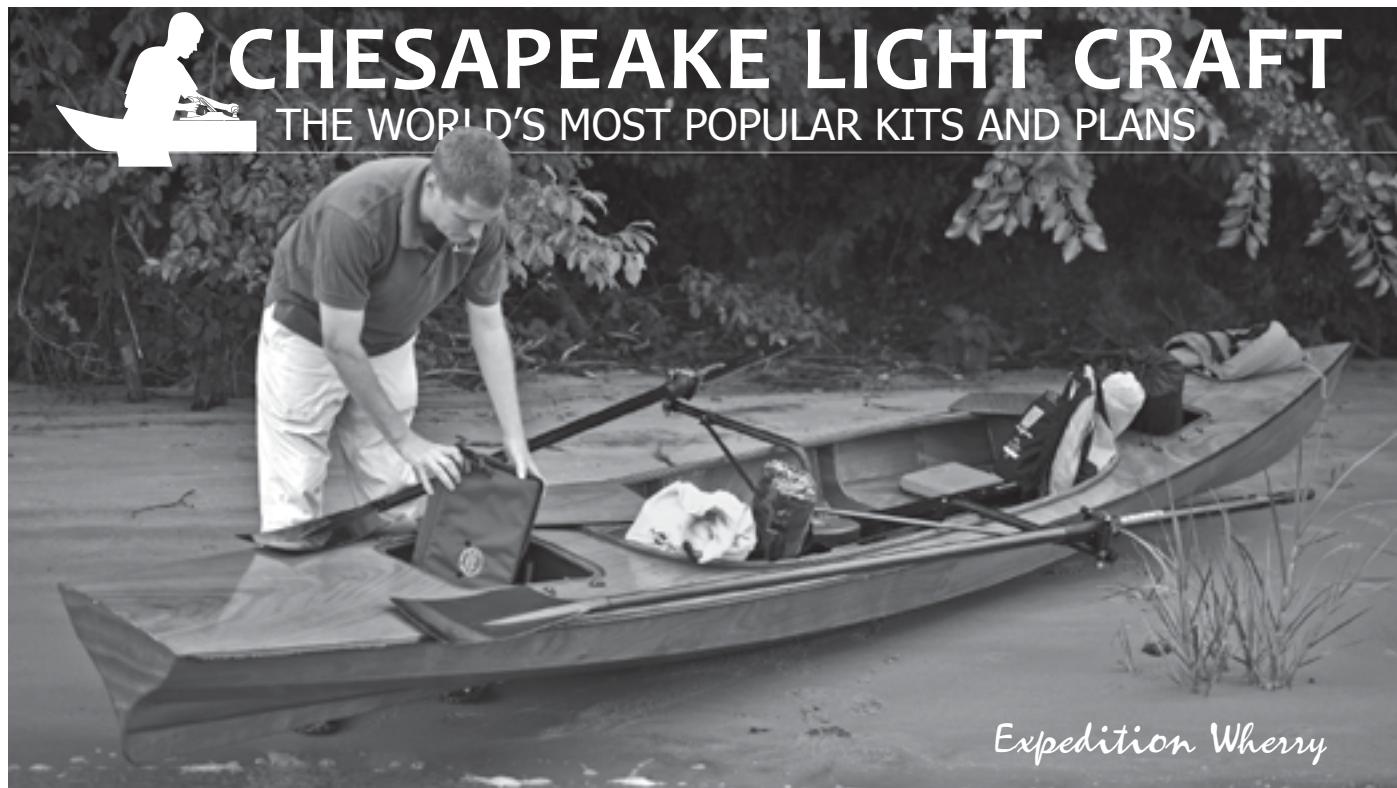
How It Works

Inside, little handles on the left and right half moon sides are used to push these hinged

sides upward and outward. As they move they push up the top. Little hooks fasten the sides to the top so that a push on a side could not send the cover back down. Overhanging rubber seals on the left and right edges of the top keep out water. Stops prevent the sides from pushing off the rubber seals. The front edge of the top is fastened and sealed to the roof. The back edge of the top rolls on two little rollers to extend under a shallow "garage" to keep out water. The garage can have little weep holes outside its coaming to drain any drips. Material seemed to be either galvanized steel or aluminum of #14 gauge or greater thickness. Thin high density polypropylene might work, or plywood with shallow crosswise cuts on the underside of the top, if necessary, to make it flex enough. Raised, it gave full headroom over most of its length. Lowered, it raised the original roof only about 4". It didn't leak or let in bugs. It wasn't noisy going down the road. The little windows in the sides, with mosquito mesh and canvas covers, really worked.



To make this work on a Birdwatcher, a large waterproof hatch would be needed forward to tend halyards, jib and anchor. I admit, as shown, this top doesn't give as quick passage forward. And a 250 pounder could dent it if he fell on it. But I have great faith in other *MAIB* readers to figure out how to make this work.



CHESAPEAKE LIGHT CRAFT
THE WORLD'S MOST POPULAR KITS AND PLANS

Expedition Wherry

KITS & PLANS FOR KAYAKS • CANOES • SUPs • ROWING CRAFT • DINGHIES • SAILBOATS

95 AWARD-WINNING DESIGNS | EPOXY, MARINE PLYWOOD, TIMBER, AND MORE | BOATBUILDING CLASSES SINCE 1994

CALL 410-267-0137 OR VISIT CLCBOATS.COM FOR A FREE CATALOG AND MUCH MORE!



A Conversation with Will Weidner

Designer of the Steam Launch *Equinox*

Reprinted from *Smokestack*
Journal of the North American Steamboat Association

By Tim Lynch, Editor

This article is based on a series of discussions that *Equinox*'s designer and builder, Will Weidner, and I had over the winter and early spring of 2014. Thank you, Will, for your patience, tolerance and thoroughness throughout. As is usual in my interviews, my meandering questions were unencumbered by my thought processes, resulting in unusual, yet interesting, tangents into the engineering and history of boat design that I'm hoping the reader will find illuminating.

First, let me state that Will was never really interested in building a high speed steamboat. The idea of elegance, developing an efficient boat capable of cruising at higher than average speeds using very little power, has always intrigued him. This task was to prove a significant engineering challenge. While Will's first boat, based on a *Rose* hull, is perfectly adequate for the kind of cruising that we do on the lakes and ponds of New England, he was looking for a hull that could "loaf along at 6-8mph with a moderate passenger load and move up to over 10mph when flat out with two people on board." He estimates that the *Equinox* uses about 1.5hp to move at about 7mph. In contrast, his *Rose* reaches about 5.5mph under the same conditions and peaks out at about 5.75mph, using most of its output at that speed for climbing its bow wave.

Will's curiosity got the best of him and he set out to design a hull that would move gracefully and efficiently on minimal power using his own double simple, *Equinox*'s beautiful 4hp engine. This task required significant attention to engineering detail and examination of combined efficiency of all components. This article delves into many of the considerations in the process as they relate to general hull design.

A Bit of History

In a sense, the history of fast, efficient steamboats began as a history of naval military stealth. From the American perspective, the main impetus was initiated with the advent of the Civil War and the blockade of Southern ports by the Union Navy. The development of

at night while silent running with minimal boat visibility and wake, then fix or release the charge under the hull, detach the spar and quickly withdraw. Since the torpedo was fired by either a lanyard or electric wire, the spar torpedo boat crew was usually very close to the target when the charge went off. This required an incredibly brave crew and the best technology of the day, including slippery hull designs that reduced visibility, waveform, and propulsion noise.

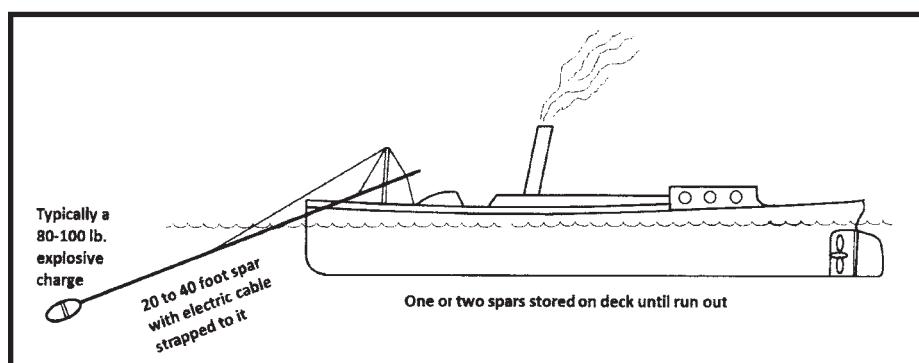
If you want to see a fantastic video about a real hero, Lt William Barker Cushing, and a Union spar torpedo mission to sink a Confederate ironclad, *Albemarle*, you must download Carl Kreigeskotte's History Channel documentary via iTunes. It's entitled "Most Daring Missions of the Civil War," part of a collection from the "Secrets of the Civil War." Carl has done great documentary work, earning three Emmys in the process. As an aside, the two steam launches used in the film belonged to Carl and fellow steamboat captain Dave Thorpe. It was produced for the History Channel in 2005.

After the Civil War, fast, narrow torpedo boat technology really escalated. As an example, Herreshoff produced the 58' *Lightning* in 1876. She carried two spar torpedoes and was capable of 20 knots. Look familiar?

The US, UK, France, Russia and other industrial nations advanced quickly in steam technology and began a race that focused on narrow hulls, efficient boilers, condensing engines, high speed propeller design and, eventually, self propelled torpedoes. The "pull tank" became the tool of choice for hull testing. Boat producers like Herreshoff (*Now Then, Stiletto, Say When, Henrietta, Javelin*),

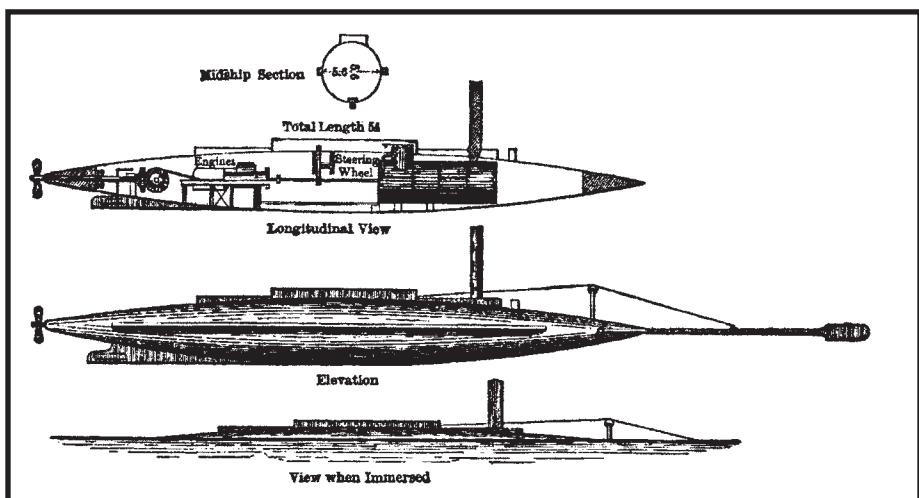
the spar torpedo led to the evolution of quiet, slippery hull forms that could sneak up on anchored Union blockade ships in the dead of night: impale, or float a charge under the hull of the enemy and explode that charge while in the process of making a fast retreat.

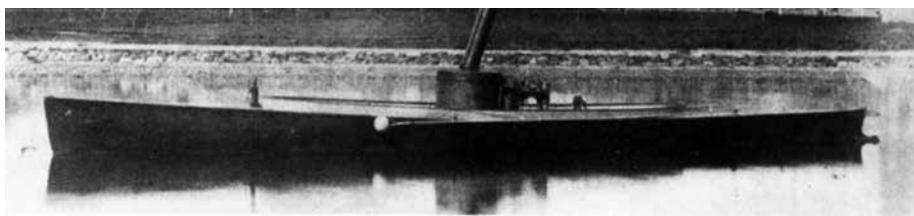
Typically, the attack boat needed to quickly approach the target vessel broadsides



Typical Spar Torpedo Launch of the 1870s.

Sketch showing torpedo boats as constructed at Charleston, South Carolina.

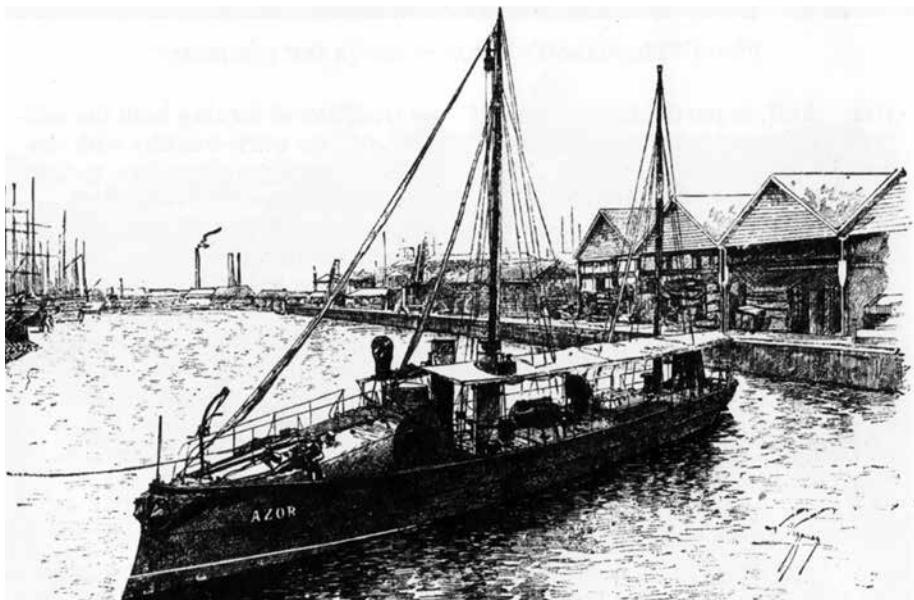




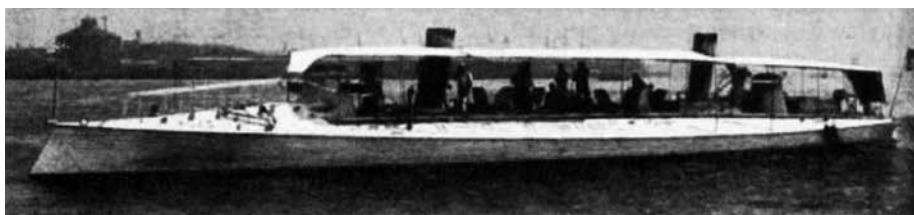
Herreshoff's *Lightning* outfitted with two spar torpedoes.



Turbinia.



Yarrow's *Azor*.



Herreshoff's *Stiletto*, capable of launching self propelled torpedoes.

Herreshoff's *Lotus Seeker*, a fast commuter.



Mosher (*Buzz*, *Yankee Doodle*, *Norwood*, *Arrow*), Yarrow and Thornycroft all produced fast, narrow torpedo boats of similar configuration. Special mention must be made of *Turbinia*, by C.A. Parsons, the first axial turbine powered fast experimental torpedo boat. While the engine was a radical departure, the hull was consistent with contemporary fast torpedo boat practice.

Herreshoff, in particular, was one of the first US yards to merge their fast naval torpedo boat designs with comfortable similar "fast commuter" vessels for the ultra wealthy. In the "fast commuter" heyday, an American oligarch could leave his oceanside residence's dock on Long Island or the Connecticut shore and arrive at the financial district of Manhattan in a relatively short period of time and in great comfort, all this while avoiding the riffraff at the local train station. Herreshoff, it seems, was one of the first marine tech companies in the US to adopt that age old European tradition of serving both the military and the ultra wealthy with the best combination of modern technology. Unfortunately, Herreshoff stopped developing steam-boats when they lost their steam engineering license after a boiler accident that cost the life of one of the crew. The Herreshoff family, it seems, were better attuned to the needs of the wealthy than the government anyhow, a skill that paid them handsomely in their competitive sailing craft.

Hull Speed, Waveform and Speed/Length Ratios

"Design speed" or "hull speed" occurs when a boat moves along the surface in a level manner, pushing the water aside and along the hull. In displacement mode, the boat is kept at the surface almost entirely by Archimedean "buoyant lifting forces" equal to the weight of the water the hull displaces. Displacement motion disturbance produces a waveform that begins at the prow and transitions rearward and increases in amplitude and wavelength as the boat picks up speed.

The design or hull speed of a displacement hull, it is said, is reached just before that point when the bow begins to lift and climb its own bow wave. At this point, the water line of the hull is still parallel to the surface of the water and the wavelength, the peak to peak length of the wave, is equal to the length of the waterline and the boat will appear to be in a trough behind a large bow wave. Any additional energy put into propulsion beyond this point begins a highly inefficient "plowing mode" where the boat begins to climb up its own bow wave.

Any power output to the propeller beyond the hull's design speed will usually result in less and less relative energy input becoming forward movement. Hulls move most efficiently at their displacement design speed. However, if a boat has sufficient power output it may be able to climb up and on top of its bow wave and enter planing mode. In planing mode the hull has minimal contact with the water surface, and hence minimal drag. To minimize contact with the water, planing hulls typically have flat or V shaped, hard chined plane surfaces. Planing, however, requires very high power output not typically achieved in most modern steam-boats. Approaching the limit of displacement hull performance are boats like *Oberon*, a hard-chined, narrow boat built by Brian and Paul Smith in the UK.



Brian and Paul Smith's *Oberon*.

Exciting videos of *Oberon* can be seen at: <http://WWW.YOLtube.com/watch?v=6ff9BT3nitU> and <http://www.youtube.com/watch?v=iiiPHTtd2laZU>.

While the terms "hull speed" or "design speed" are good visual indicators for efficiently running a steamboat, they are generally no longer used by boat designers. In general, Froude numbers and the ratio of the speed of the boat to its length at the waterline are found to be more useful. A simple approach to calculation of approximate "hull speed" in knots is found by multiplying 1.34 times the square root of the length of the waterline in feet. The speed in knots divided by the square root of the length of the waterline in feet is called the "speed length" ratio (in spite of the fact that it's actually the ratio of the speed to the SQUARE ROOT of the length). Actually this "constant" can vary from about 1.34 to 1.51 depending on the "fineness" of the hull.

Using this equation, a *Rose* hull with a 17.5' waterline has a hull speed of 4.18 knots (4.81mph) and *Equinox* with its waterline length of 28' would have a hull speed of 5.29 knots (6.09mph). But, as you'll see, not is all it seems and wave making resistance can be dramatically influenced to exceed hull speed without planing by refining the lines of the hull. Long displacement hulls with narrow beams, very fine ends and "wave piercing" features can often double calculated hull speeds. These modern non planing designs are found in racing rowing shells, kayaks, catamarans, high speed multihulled ferries, etc.

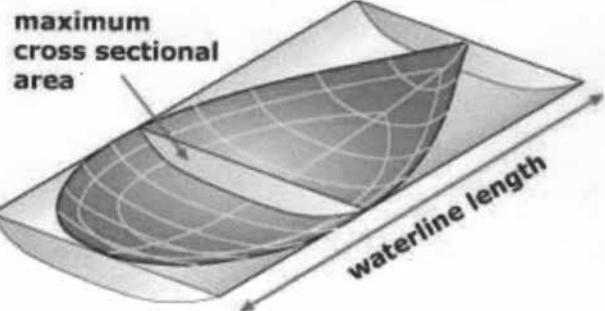
When Will designed the *Equinox* hull he focused on the prismatic coefficient (Cp) which is a kind of "hull fineness indicator." He stated, "A boat whose hull changes slowly will slip through the water easier and generate less wave making resistance than a hull with a rapid rate of change. This is where the prismatic coefficient comes in, it's a measure of how quickly the cross sectional area changes, or in sailing parlance, of how full or fine the ends are."

The Cp thus indicates the longitudinal distribution of the underwater volume of a yacht's hull. See more at <http://www.sailboatcruising.com/prismaticcoefficient.html#sthsh.shl0h0oh.dpuf>.

In an easily driven hull the prismatic coefficient ranges from just under to just over 0.52. A boat with a Cp of 0.525 or less is usually considered a very "fine" hull and is optimized for speed in a displacement (non planing) hull.

$Cp = V/(L \times A)$ where V is the immersed volume or displacement of the hull in cubic feet, A is the maximum cross-sectional area in square feet, L is the waterline length in feet.

The Cp thus indicates the longitudinal distribution of the underwater volume of a



yacht's hull. A low (fine) Cp of 0.525 indicates a very fine hull with both fine ends.

A large (full) Cp 0.70 indicates a hull with relatively full ends. *Equinox* has a Cp of 0.540.

The Stabilization of a Narrow Hull

Will was completely taken by the early revival launches like Dick Mitchell's *River Queen* and Bill Durham's *Panatela*. He studied Nat Herreshoff's easily driven boats, those elegant engine and steam boiler packages, combined with fine lined hulls, provided high power to weight ratios. He also investigated British Yarrow and Thornycroft boats, particularly the rapid early global evolution of fast torpedo boats and early "destroyers." He always has owned small, simple cars that do their job economically and perform well, "You don't need something huge." To this day he is turned off by excessively large things. He enjoyed Bill Durham's perspective, supporting hulls with high length to beam ratios.

There's the tradeoff, low speed vs high speed efficiency. That's why Will settled on a compromise, almost a canoe double ended design much like a narrower version of the original Truscott "Compromise" hulls. As a fantail launch exceeds its design speed, it begins to climb its bow wave, squat and the under surface of the fantail immerses in the water, increasing the boat's drag. While the fantail hull is nice for seagoing vessels and rough water, since it offers increased buoyancy in a following sea, it offers no advantage in most river cruising.

The upper reaches of the Connecticut River near his home are Will's favorite cruising spot. They are fairly well protected and wide

enough to not need any fancy tight maneuvering. The Edwardian gentleman's narrow commuter seems a logical design fit. He examined many narrow boat designs looking at their cross sections, waterlines and righting characteristics before settling on his design to refine the turn of the bilge, maximize stability and minimize drag. As I stated in the first article, many modern and older boats were admired and influenced his decision.

He introduced me to the steam canoe *Little Pal*, built by Pete Moale Jr in the early '80s. His father built *Panatela*, one of the first fast, lightweight modern launches. *Little Pal* used a fiberglass canoe, 20'6" loa x 38" beam. It had a Stuart 5a turning an 11"x22" 3-blade prop at 580 rpm @ 150psi. It had a 17sf all copper three drum express boiler. It could go 8mph. Good things do come in small packages.

Will began his designing of *Equinox* nearly 20 years ago. At that time he had no access to CAD design software and so all of his engineering drawing analysis was done on graph paper by hand. Analysis of "righting" stability was done by the "counting squares" method of determining cross sectional area of each transverse segment. Nowadays he also uses AutoCAD and Solidworks for the purpose which has both simplified and verified his original handmade calculations. Using Solidworks he became able to fully loft his design.

Here's Will's description of how he hand calculated the righting characteristics at a given cross-section:

"It is possible to determine important characteristics of a hull shape with only simple tools. A steamboat has massive compo-

Little Pal



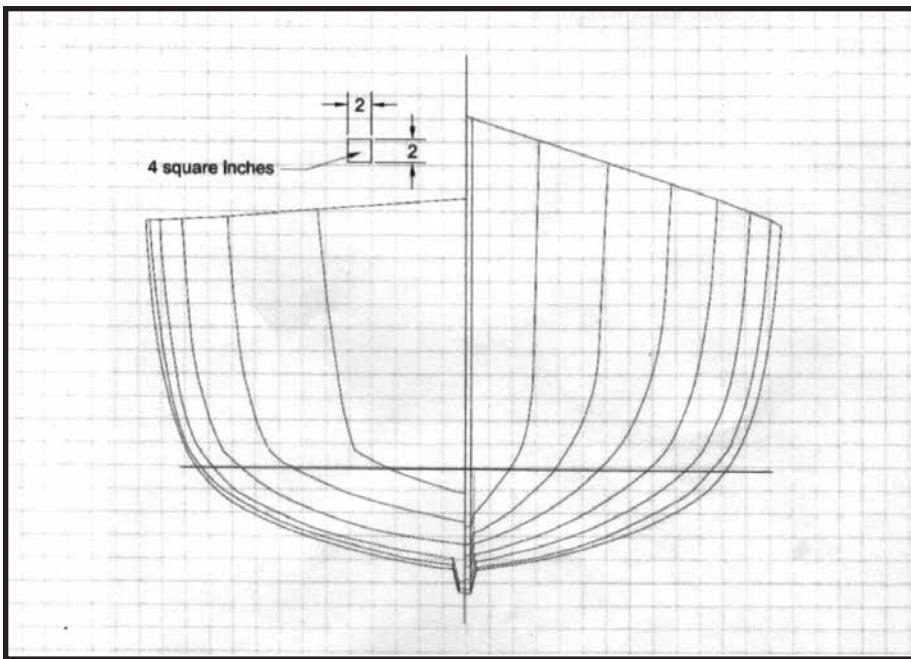


Figure 1

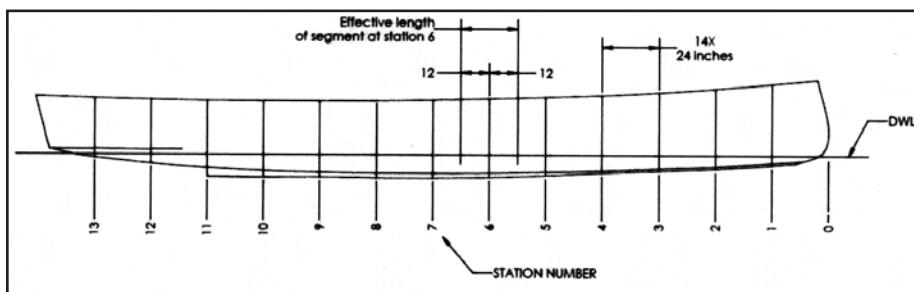
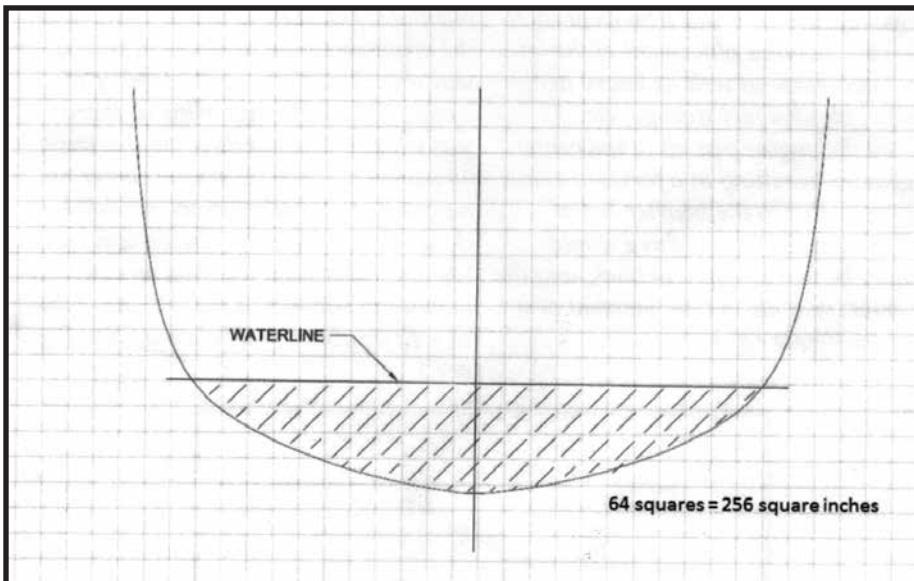


Figure 2

Figure 3



30 – *Messing About in Boats*, March 2015

ments centrally located so it's useful to know that they are installed in the best location and that a high center of gravity cause by a VFT boiler won't cause stability problems.

"When designing a hull a naval architect would have used a planimeter to determine cross sectional areas of hull sections, but nowadays uses sophisticated CAD software. I didn't have either of these when I designed my hull so I used a method that I call counting squares. All that is needed to perform this analysis is dimensional information about the hull, some graph paper and a pencil. After I took measurements off the half model, I laid out a scale drawing on graph paper as shown in Figure 1.

"Each cross section is made at a station. For calculation purposes I assumed that the volume of the cross section extends half the station distance, 12" forward and 12" aft in this case. See Figure 2.

"Now, the cross sectional area of each can be determined by counting the squares below the waterline. In the case shown, the cross section at the middle of the boat has 64 squares. We need to count partial squares too and add them up. With a little practice it gets easy to glance at a one third square and a two third square and count them as one. See Figure 3.

"The next thing I did was determine the fore and aft center of buoyancy. This is done by the calculation shown in Figure 4. Note that the total displacement of 1713lbs is also determined.

"If the center of gravity of the boat coincides with the fore and aft center of buoyancy the boat will trim as predicted. This includes placement of the engine and boiler as well as heavy items like people and fuel storage, etc. I placed the engine just aft of the center of gravity, resulting in a forward center of gravity due to the heavier boiler. This is because I knew there would usually be more people in back and the rearmost seat has a long moment arm from the center of gravity.

"It is also possible to determine the lateral stability of the boat using this method. The waterline can be tilted on the cross sectional drawing in such a way that there is an equal number of squares below the waterline as there was when it wasn't tilted, in this case, 64 squares.

"Next, locate the center of buoyancy of the tilted cross section by determining that point (in that area below the waterline) that has an equal number of squares to the left and right as well as above and below it. See Figure 5.

"While Figure 5 does result in an accurate and rapid analysis of righting forces some readers may be more comfortable with a diagram tilting the hull and keeping the waterline level.

"As you can see in Figure 5b the results are the same either way. Of course, the height of the center of gravity is critical to lateral stability. It is clear in Figure 5b that raising the center of gravity reduces the righting moment. Note that a line perpendicular to the waterline that goes through the center of buoyancy is offset 2" from the center of gravity. This is called the righting moment arm and when it is multiplied by the displacement of a section results in a righting moment which is the torque created by buoyancy forces on the hull to oppose an off center load. The moment arm is dependent on the height of the center of gravity above the design waterline. See Figure 6 to see the effect of the height of the center of gravity.

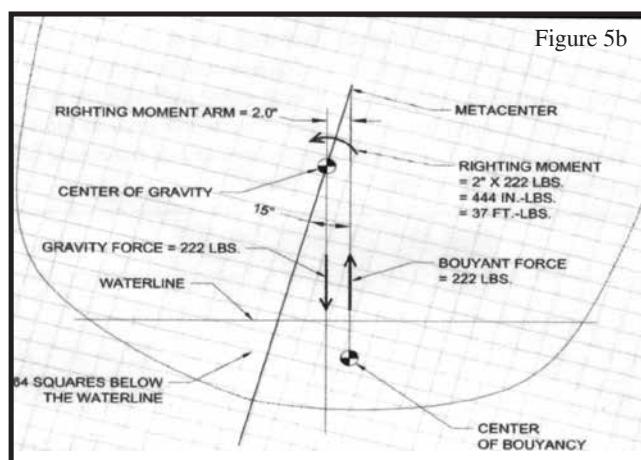
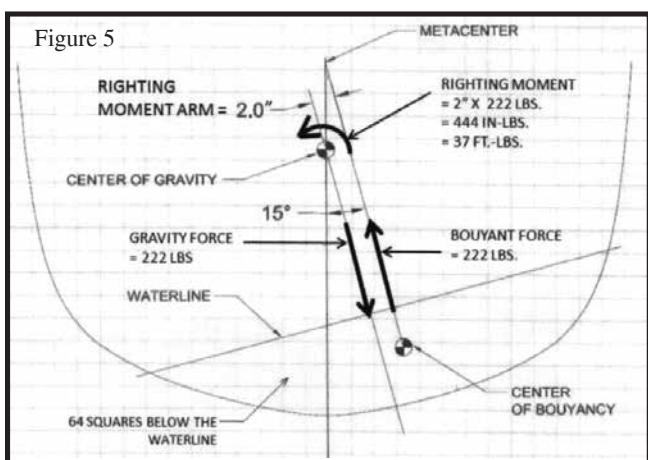
Distance from the stem in feet	Number of graph paper squares	Multiply by 4 to get the cross-sectional area in square inches	Divide by 144 to get the area in square feet	Multiply by distance between cross-sections (2 feet in this case) to get the volume in cubic feet	Multiply by 62.4 to get the displacement in pounds	Multiply the displacement by the distance from the stem
2	4.75	19	0.13	0.26	16.5	33
4	13	52	0.36	0.72	45.1	180
6	22.5	90	0.63	1.25	78.0	468
8	35.5	142	0.99	1.97	123.1	985
10	47.75	191	1.33	2.65	165.5	1655
12	58.75	235	1.63	3.26	203.7	2444
14	64	256	1.78	3.56	221.9	3106
16	65	260	1.81	3.61	225.3	3605
18	62.25	249	1.73	3.46	215.8	3884
20	55	220	1.53	3.06	190.7	3813
22	40.5	162	1.13	2.25	140.4	3089
24	19	76	0.53	1.06	65.9	1581
26	6.25	25	0.17	0.35	21.7	563
add up these columns-->				1713.4	25407	

Location of center of buoyancy (from stem)

$$= \frac{\text{sum of (distance x displacement)}}{\text{sum of displacement}}$$

$$= \frac{25407}{1713.4} = 14.8 \text{ feet from the stem}$$

Figure 4

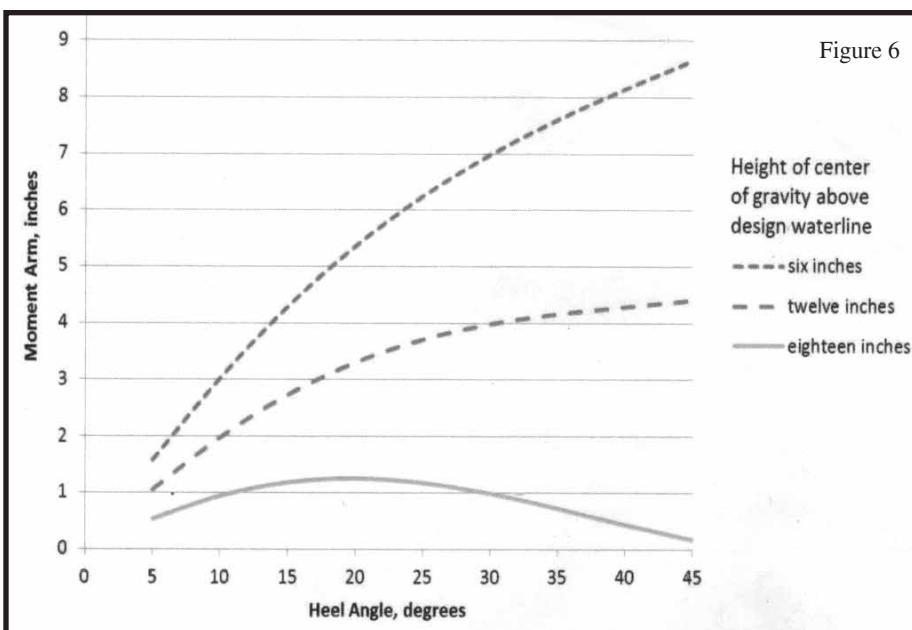


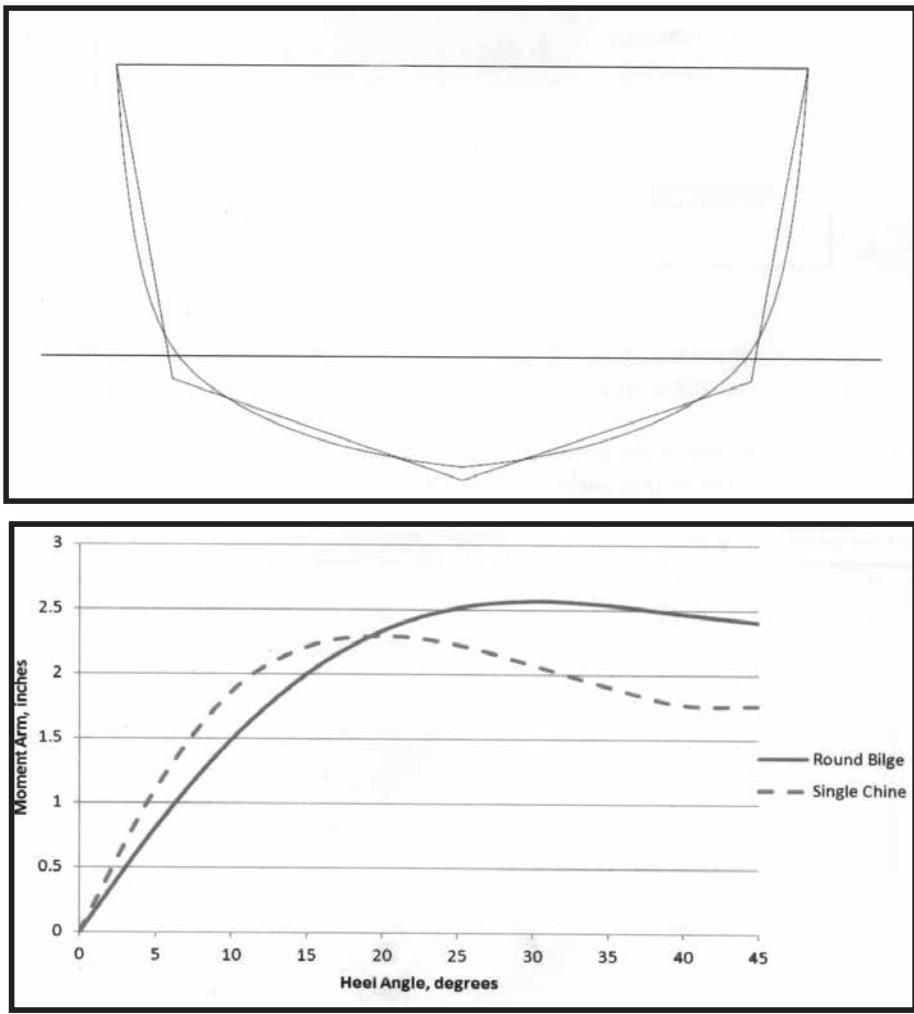
"When doing this stability calculation, you should look at a few stations ahead of and behind the biggest underwater section and add the righting moments together. For most steamboat hulls that have double ended waterlines, the front and rear sections don't contribute much unless the hull is wide and flat in back. In fact, the smallest sections may actually have negative moment arms and would be trying to tip the boat over rather than trying to right it.

"It is interesting to compare a round bilge hull with one of the *Panatela* form (plywood construction, single chine). A single chine hull with the same beam and underwater area as mine is shown superimposed on the round bilge hull in Figure 7.

"A plot of moment arm vs heel angle is shown in Figure 8. It can be seen that the *Panatela* is a little more resistant to roll initially but loses out ultimately to the round bilge design.

"When I designed my hull I used the graph paper methods to determine where to place the heavy loads considering where people would be sitting and to check stabil-





ity. Another bit of useful information that was revealed was that adding or removing 200lbs would change the immersed depth about $\frac{1}{2}$ ".

"After the hull was designed and construction started I acquired CAD tools that would have made the job much quicker and more exact. I now have solid modeling software that makes it easy to slice everything off a model but the underwater portion at any heel or pitch angle and then measure properties such as volume and centroid location. I was able to check the work I did earlier with graph paper and the results were remarkably similar. For example, the displacement of 1713lbs calculated in Figure 4 compares well to the 1722lbs obtained from the lofted solid model."

When the dust settled, Will realized that his pursuit of elegance and efficiency in displacement mode had led him to focus on his ideal craft, a 28', round bilge, narrow hull able to make full use of his beautiful 4hp engine and boiler.

The Solitude of the Long Distance Steamgeeza

Most of us realize that we are engaged in a hobby that has few enthusiasts. Lots of

admirers but few who will be at the dock to sign on for a cruise. We usually build boats to hold numerous passengers and find that we set out on a cruise alone. Consequently, Will set out to build a long boat that could be easily single handed, launched and retrieved. Will designed the trailer so that it would slip the boat into the water easily and evenly, so that as soon as the stern hit the water, no additional pressure would be placed on the bow as the stern became buoyant. In this way, the boat easily slips off and onto the trailer. All in all, in my opinion, his results were a perfect blend of beauty, efficiency and convenience.

In summary Will stated that, "Overall, the boat came out a little heavier than I wanted." Originally shooting for 1,100lbs, his final weight was about 1,300lbs, some of the excess coming from slightly heavier elements added during construction. and not spending a lot of time in the planning stages estimating the weight.

From the conn". "It can be a very busy boat... Feeding the boiler with wood turned out to require more time than anticipated, especially during fast cruising." Will added that it would have been good to have an addi-

tional helm station in the forward cockpit. All in all, Will is very happy with the outcome. At one time he had considered building a 23' fan-tail launch because of its passenger capacity but the *Equinox* can carry just as many passengers in great comfort and speed with a smaller engine. It is everything he wanted in a boat.

It is hoped that readers will glean some useful information from this article, particularly as it helps reflect on the evaluation of the variety of hull designs. Certainly a "narrow fast commuter" design does not meet the needs of many steamboaters, but it is perfect for Will and steaming the Connecticut River.

A Look at the Stern

As can be seen, the entire stern in contact with the water aft of the skeg has been hard chined. This is to reduce water contact area and the drag of the high velocity prop wash on the hull. By hard chining this portion of the hull, Will hoped to sheet the prop wash and hull wave away from the hull at higher speeds, thus reducing drag. Also, this feature does offer some increased buoyancy in a following sea. An examination of *Oberon*'s video should convince the reader that the turbulence of high speed prop wash can cause water shedding issues. Will paid great attention to the design of the stern area, carefully streamlining the hull, skeg or deadwood, prop shaft fittings and rudder.



BUILDING THE MOSQUITO FLEET THE U.S. NAVY'S FIRST TORPEDO BOATS

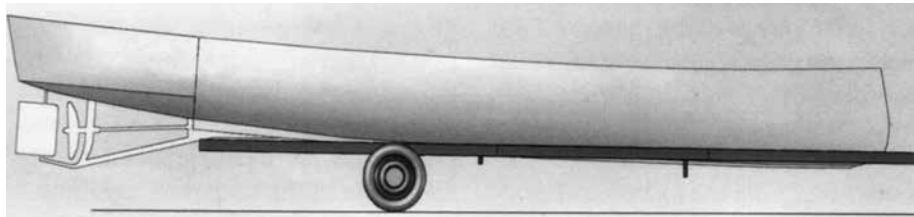


Building the Mosquito Fleet The US Navy's First Torpedo Boats

By Richard V. Simpson
ISBN: 9780738505084

160 Pages

Publisher: Arcadia Publishing



With words of gentle encouragement such as these, and steadfast support for all things creative, our friend, the Bard of Bradenton, has launched a thousand ships:

"OK Dan, I want you to slam yourself in the head with a 2"x4". Return her to a closed bow ski boat? You didn't really say that did you? Shall I go on craigslist and find you a hundred more at pretty much giveaway prices that fit that description? If you do this our opinion of you as a world class wood butcher will fall to lower than doggy do on the bottom of your shoe. The image of the resulting abomination would haunt me forever, not to mention your total excommunication by the rest of the custom boat world. Be prepared to change your name, have extensive plastic surgery and move to all the way Canada. What do you think guys, that pretty much sum it up?"

And with such a rousing sendoff as this, how can I resist? This is the year. Now is the time. I'm gonna build myself a real cool boat. Impractical? Certainly. Extraneous? Absolutely. But waaaaaaaay cool nonetheless.

Just try to remember a time when those snazzy ads for Chris Craft and Century didn't grab you by both ears. You know the ones, decked over with fore and aft planking that gleams in the sun. Always some dude in polo shirt and windbreaker at the wheel. Always a small bevy, sitting provocatively on the gleaming white rolled and pleated. Sure, you know the ones.

No muddy anchors or sandy footprints in sight. No overturned jar of salmon eggs floating in the bilge. Not a single mooring line or fender to mar the image. Just varnish, chrome and cool. Well, that's the muse.

Sort of like a lot of these Frankenbot projects I get myself into, this current one started pretty innocently. I needed a trailer. The hull sitting on it was in pretty decent shape. The engine ran and the propeller turned. The gel coat looked like it would buff out. And did I tell you that this boat had the niftiest profile to come along in a long time? Real deep forefoot. An interesting turn of the bilge. And best of all, a kinda pouty bow and sheerline. You know. Pouty.

The interior had new seats and the guy insisted that everything worked. He'd kept her dry and under cover. What a bonus for a guy just looking for a trailer. The original vinyl was still in place on the original padded dashboard and hull panels. A regular time capsule. All I had to do was "simply" put hydraulic fluid in the trim pump, gas in the tank and go launch.

Yeah, right. Like I was saying, the engine ran until I fixed it. The instrument cluster didn't exactly fall to dust until a day or two after I got this lashup home. The cockpit floor wasn't anywhere near as springy until the second or third time I crawled inside. The original vinyl on the engine box and "water ski lockers" did actually hold up, until the first time I stuck a screwdriver into it.

But what's a total gut out and rebuild? Just some more glue, and resin, and sawdust and milled hardwood, paint, varnish and cuss words. And gooey stringers turned to mulch. I think I'll call her *Strumpet*. But never fear, Dave. This is not only gonna be a one of a kind, I might even let you ride with me.

That was a year ago and all I wanted then was a damn runabout. But I got convinced to build something original and I did. However, this one will also be quite original and, like I said, I might even let you ride with me.

Strumpet

By Dan Rogers

guys ride in it. I already got the new floor roughed in tonight between the snow plowing episodes. Next step is to figure out how big to make the twin cockpits and how to make a tilt up engine hatch.

Now all I gotta do is figure out how to lay a planked deck. Unfortunately Mexico is a long way to go for rolled and pleated seat backs. We've got four deer in the front yard right now. I guess I could use real doe skin, huh?

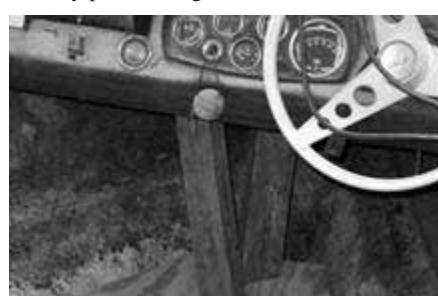
Like I said, this will not only be the only one like it, it'll be waaaay cool. Just SFB.



The last of the homedos are homedid. One little bench and a couple lids still hadda be revarnished. Now the boat building season can begin.



Sheer panels to re level the decks and a scientifically placed "engine room" bulkhead.



Still a few supports to create, up forward. But, with enough 3/4" A-CX, I could probably build a mine shaft.



The engine hatch support frame has to be strong enough to walk on but light enough to lift out. That one took a couple minutes of head scratching. But it seems to be both solid and stable. This is with the hatch "blanks" just set in place. One day they should have hardwood overlay and either hinge or lift out or maybe both.



Tomorrow comes the aft seat riser and all that stuff. More deck supports, etc.



Time to do a little rippin' and tearin'.

And a quickie floor job.



Strumpet Project Day Two

I get nothing but excuses from the Engineering Department over a bunch of no ‘count stuff called “trim and balance.” They think I put too much weight in the stern. I tell ‘em, “That’s OK, go ahead and put more stuff in the pointy end, too.” The lumberyard guy told me that those $\frac{3}{4}$ ” AC sheets are over 50 pounds apiece. Subtracting, about ten pounds per sheet in sawdust and offcuts, that’s only about an extra couple hundred pounds so far. And besides, Gene is the one who gets to take the Dallas cheerleaders in his boat, I don’t probably get to take so many passengers. So anyway, after messing around with those exotics like measuring and fitting and planning, progress sort of slugged down a bit today.



The three section engine cover business got spruced up a bit and can probably do the job now. Although those panels might turn into foam blocks with veneer and tigerwood overlay. They are some kinda heavy this way. TBD.



And the redone cockpit sole was sort of lumpy, so it got a second layer to smooth things out and to give a place for the forward sheer panels to rest. Total pain getting them to mesh with the curves of the hull and all those bumps.



And the seat had to be fitted to both stay put and take the weight and pull out. The engine bulkhead and hatch frame both lift out to allow for major engine work, etc. Lots of screwing around with that old bugaboo, measuring and fitting. Yep, that’s a floor jack under the seat. I still have to tweak the foredeck a bit to take 40 years of gravity sag out. Dunno if there will be lift lids in the seat or a drop-front panel. Probably lift lids and an angled seat back/full width cushions.



Now the next moment of truth. I think my knees don’t like the idea of clambering over a double cockpit sort of arrangement. And that would have to have cambers added to the transverse decks. Soooooooo, I’m thinking that I’ll maybe make some sort of eggshell seat for El Capitan and maybe a drop/jump seat for somebody else up forward. I tend to stand at the helm anyway. So open floor space is probably better.

Tomorrow is taken up with taking Cliff to the raygun place and Saturday with helping Sam put a slider in his dining room wall. (Now that takes no brains to cut a 6’ hole in your house and then not be able to get the damn door to fit in January in Almostcanada.) Well, Sam was an aerospace engineer so he may have a special deal with God. So the Ripnleaf Boat Shop will stand a bit quieter for a couple days, I guess. Maybe a second shift tomorrow.

Strumpet Project Day 2 Point 1

I was out doing “other things” today. Boat work got shoved a bit to the back burner. Anyhow, we do have an impressive pile of fiberglass dust, splinters and chunks to show for the old vinyl covered and padded dashboard. There is a shaped header under the foredeck to hold things up better.



Well, yes. That IS the steering, and instrument panel, and shift control unit, and tilt control box hanging there in a heap. Well, no, I DON’T have the haziest notion of what I’m gonna do with them. Or where they are gonna go or how they’ll hook up. But that’s for next time. But somehow the dashboard area is going to extend back a bit. Somewhere between about 6” and 14” or so. The big idea is to be able to step up behind the windshield and then step over it without breaking either bones or glass.



That’s a 4” wide by three course $\frac{3}{4}$ ” ply beam. It should hold most anybody agile enough to stand on it. Now I just wonder how big that platform should be. And I wonder where I’ll put the steering wheel.

So, while I’m getting my evening dose of Motrin as antidote for the day’s activities, the beam is awaiting the TBII to harden. Next it has to be shaped to the camber, mounted transversely, covered with a plywood “subfloor” and ultimately done in hardwood planking to match the engine cover.

This is the stuff that drives people with orderly minds absolutely nuts, huh?

Strumpet Project Day Two Point Five

Another day off doing good things for other people. While I don’t mind that a bit, it doesn’t get a lot of boat building done. Anyhow, I did get in a short shift after dinner and got the new dashboard from the laminating state.



To the framing state...



To the closed-in state.

The idea was to allow for a place to step over the windshield from the foredeck. And it will become the substrate for tigerwood strips. In fact, all this fir plywood is supposed to become substrate for more decorative wood coverings. At least that’s the plan from this vantage point. Some have suggested (gently) that this project is gonna take a lot of lipstick. And hopefully that wood overlay will be just the lipstick required.

Nuther half day, yet, of getting a steering wheel mounting board up and closing in the focs’l and I should be able to start cutting up perfectly good hardwood into small strips, large piles of dust and lots and lots of noise.

Strumpet Project Day Three

The night shift supervisor caught me malingering in front of the TV set about 2300. He pointed out that instead of "just sitting there" I should be back at work. He went on to remind me that if I'd just get a steering wheel and instrument panel mount figured out; the majority of "structural stuff" would be done.

Soooooo, now we have a more or less gingerbread ready Frankenbot. The "final" piece was to figure out how to set a panel at 15° slope, and against a more or less fair camber of a 1" drop in 60" span. Oh yeah, with about a 12° slope to the outboard panel but with a diagonal component. And I had to make allowances for remounting the shift/throttle control arm business back inside a now glued and screwed sheer panel (we'll see in a while if I guessed that one out correctly).



The kitchen chair has been my go by for several of these ergonomically questionable projects. I use it to figure how high, how far back and such. It doubles as an auxiliary Moaning Chair.

The aft seat is more or less in place and figured out. In this shot it's holding up the little shop vac. And like EVERY ONE of these jobs I've done in the past five years, the steering wheel refuses to part from the spindle without becoming chunks and shards. And it HAS TO COME OFF to get reinstalled in my fancy new panel.

The engine hatch panels in the foreground will hinge fore and aft to the center section. That section will latch down from the inside. The two outboard panels will gull-wing to an open position with some sort of hatch holders or lay flat individually across the center. The idea is to be able to get at the engine, or even walk all the way aft to the transom without having to perch on the deck level hatches. It's sort of a deal I make with the orthopedist, to attempt to grow old WITH these boats instead of growing old BECAUSE of them.

And speaking of orthopedery, the next phase will require a ton of hand work with resawing and shaping and smoothing and fitting a bazillion saw dulling strips. So far this is a PL Premium and deck screw job. I'm hoping that the same goop with minimal pin nail fasteners will hook the gingerbread on and keep it on.

And to compound my violations of "All that is Holy within the Real Boat Builder Community," a final travesty. The interior taping and sealing will be done with a latex roof seal coat and polyester seam tape that has worked on the past couple of these Frankenbot creations. Remarkably durable, apparently watertight. And no mixing. No apparent lung irritation that I get from the 'pox.

Beyond that, a few unknowns persist. This just might be the boat that gets a finished bright wooden inlay strip sole cov-

ering. Maybe. I just sort of shudder at what beach sand and tennys can do to something like that. And there is still this image of a laminated barrel chair for the Head Posterior that the Design Department insists on shopping around with the actual builders. Maybe those guys will get their way yet.

Time to start decorating this Frankenbot.

Strumpet Project Day Four

I think this particular excursion into imagination meets reality has taught me a valuable lesson. Again. The picture I have in my head, and the product that my stiffening fingers, painful knees and questionable lower back produce seem to differ, quite a bit. For instance, this grand plan of adding a hard-wood deck to an essentially castoff boat. I could just see the gleaming seven coats of Schooner Varnish laid lovingly over perfectly milled and finished planks. Those planks had character and figure with nary a ding, dent, chip or weather check to be seen. Every plank was exactly parallel side to side, top to bottom. The scarf joints were exquisite. And so forth. I do have to admit the mental picture is what got all this tomfoolery started. And it's what sustains it.



Grist for the mill: Part of my precious tiger-wood stack, quietly warping, twisting and cracking while stored on a cold and occasional wet cement garage floor. You probably know somebody like this.

Anyhow. That lesson. Even with the metaphorical shit sandwich, the bread on both sides can still be some pretty good stuff. And just about any boat that has survived for the past 30 to beyond 50 years, since an assembly line birth, was likely made as a shit sandwich.

There's always a lot of unprotected plywood and questionable solid wood stuffed under vinyl and water absorbing thin foam padding. The vinyl looked absolutely fabulous for several decades, while the plywood slowly returned to mulch and fiber. I say "fabulous" in that we might need to remember that, once upon a time, people thought avocado green was one of the primary colors, burnt orange the obvious complement. And carpets came in all the varieties imaginable, shag and DEEP shag. And yet, these boats have shown up for work on time most every time, for decades.



A couple of the almost finished engine hatches set in place as a reminder of what it all could look like. Maybe sometime soon.

Really smart guys, the ones at the top of our extended tribe of dreamers and doers, like Welsford, and Michalak, and Leinweber, will all admit it if you corner them. Boats are ALL compromises. Yep. Every one of 'em is a compromise.

So I think I'm sort of in good company. Well, I say "sort of," not to question the company so much as whether I'm in it. And while I'm drawing on outside authority, let me mention my lifelong good friend, Mike. Mike doesn't even like boats. I don't think he even bothers to read the stuff I laboriously chip out on the keyboard with those stiff fingers and sore wrists. But Mike does some really nice stuff with wood. He probably spends more time picking out the shades of thousand grit crocus cloth to fine tune the pool cue he just turned from a piece of exotic magpie tongue tree limb found submerged for the past century than I would spend building a complete Frankenbot.

And yet, I can still see the obvious marks left by his handwork. So can most anybody. The only way to get "perfect" stuff is to go to WalMart and buy some of that cheap Chinese stuff made by the millions on a million dollar CNC machine. And who would want to do that when they could have a piece lovingly carved, turned or whittled by my friend Mike?

Anyhow, that's where this project has gone. To the side of compromise. A compromise between what I can pick up and hold while vibrating in my tired hands and continue to shove through a whining saw blade. That sort of compromise.

Furthermore I have THREE band saws out in my shop. Each one has a different blade width strung up and ready to cut differing radii. And ya know what? Not one of 'em can seem to follow a curved line to make both ends of a cambered deck beam end up the same as it started on the far end. Not one of 'em can do that, no matter how nicely or not nicely I talk to 'em. I'll call it the reality of hand work.

But the real compromise comes when I finally discovered a really silly, really preventable mistake I made. Probably nobody has done this before.



Messing About in Boats, March 2015 – 35



Bigger boards, becoming smaller boards. Here, after ripping, resawing, bull nosing and sorting into long, not so long and too short.

Well, maybe if you're old enough to remember one of those nuclear armageddon flicks people used to watch while trying out the composting toilet in their backyard bomb shelters, you'll remember that movie *Dr Strangelove*. Remember how, after an hour of total whacko hubris, Peter Sellers finally realizes that he's responsible for blowing the world up? Dr Strangelove sort of blew my world up. Sort of.

That's sort of how I felt when I FINALLY figured out how all my planks seem to have an infinitesimally different twist to 'em when I get a hatch glued up and ersatz planked with a hundred pounds of expensive, saw dulling, really heavy and kinda brittle stuff. It just never dawned on me that my table saw had wandered out of true. About a quarter of a degree. Maybe a teensey weensey bit more. But almost not perceptible when I put a small square to it. But there you have it.



One of the 24"x42" engine hatches, warts and all. Just out of the clamps and not yet "leveled."

I remember reading someplace that the human eye can detect differences down to about $1/64$ ". And the fingertips can do even better. Well, my screw up is waaaaay more than a 64th.



A rough simulation, of a maybe layout where actual people might someday ride aboard the latest Frankenbot, *Strumpet*.

And know what? It's amazing what #120 grit on the business end of a DeWalt orbital can do in a shaking hand. Moving on.

Strumpet Project Day Five

Wow, I'm reporting five days into this project already and it's starting to get sort of exciting. No really, I usually don't have a damn clue what things are gonna look like after only five sevenths of a work week. And hey, I've only been working half days, 12 hours. Already little *Strumpet* is taking shape.



All the cutting, shaping, sanding, and fitting of those $1/4$ " thick tigerwood strips has begun to look like I imagined it. Pretty much. In fact, by the time I pulled the clamps off the third and final engine hatch, I just about knew how to do it. Not that I have big plans to become a professional engine hatch jury rigger any time soon. But at least I could better cover my tracks by the time the last one clambered into place.

Each one, by itself, weighs about half a Volkswagon. And they all need to be hinged and somehow given a way to stay up when that would be a good thing. More sanding. Lots of varnish. And tons of trim work to go. I do admit to sort of enjoy having something to remind myself that this could, maybe, actually work out. Kinda?

But the shop super sort of reminds me of when I used to try to make a living selling insurance. Back in those dreary days, when I'd have a good day, or good week, the boss would say, "OK, what're ya gonna do for me tomorrow?" So while I was sort of digging at slivers and patting myself on the back a little, it was already time to get to getting.

Next up, that extended dashboard area. And now I remember why I wondered if making a flight deck sized area behind the windshield was such a swell idea. That little soccer field is 2' deep and just under half dozen wide. That's scads and scads of tigerwood strips that have to be cut to size, sanded, fit and convinced to stay glued down.



This is what it looks like, just on the first fly-by.

Now, I also remember why I wondered how wonderful it would be if I made it cambered and sloped a bit while I was at it. So now each one of those strips has to take a slight bend. And some of them need to be shoved

into line, against their predilections. As most anybody who has watched a perfectly flat and straight board emerge from the table saw looking like several long and woody straws of macaroni will tell you, thin wood strips can have minds of their own. But maybe a couple hours on the morning shift and we'll have something that looks like something.

I did get the evil eye from the ol' super when I told him I was giving the rest of the night shift an early jump and that I was even gonna go put my feet up, too. Yeah, yeah. We'll be right back at it, come morning. Probably.

Strumpet Project Days Six and Seven



When I dreamed up this cockamamie scheme, the idea of putting a wood overlay on decks and vertical surfaces seemed like it might take a day or so. No big deal. I even asked the Head Estimator. He figured the dashboard area shouldn't take more than about ten minutes per strip.

Sooooooo, I put it on the punch list for Day Six. Before I knew it the day shift guys were claiming they deserved some time off to do homedos. No problem, I thought. I've got an excellent crew on the night shift. Those guys come early, skip their breaks and usually ask for overtime, too. The night shift oughta get done. No sweat.



Well, then the night shift said they needed time off to go plow snow. But before they knocked off early, they at least dreamed up this pretty cool little jig. Lets you fix the bull-noses, round the ends, sand the flats and stuff like that. Not bad for a bunch of lightweights.

Before I knew it Day Six had slid all the way into Day Seven. And all those guys had to show for it was a small pile of sticks, a whole bag of sawdust and nothing but complaints to show for two whole days. I sure hope your boat building crews are better behaved than mine have been this past couple days.



This is how they left me last night.

Those guys! Somehow, instead of ten minutes a board, they claim it's taking more like 30 minutes a board. They claim somebody's gotta measure and mark each one. Then somebody has to climb over the gunn'l and down a rickety ladder. Hey, if they don't like that ladder, they could go out to the garage and get a whole scaffold. But then they claim they'd have to move the two band-saws that are in the way and the metal chop saws and that really big dust collector on a cart. And get this, they figure I should come in and move those three outboard motors and the complete Chevy six and outdrive that they claim get in their way each and every time they have to climb down and go to the sliding miter saw.

Then it gets really deep. They claim that they have to cut each board perpendicular, bullnose it, sand it completely, fix chips and stuff like that and then go past all that stuff they think I should move. Like where do they think I'm gonna put it anyhow? They say they have to fit it and sometimes it doesn't fit. So then they claim they have to go do most of that stuff all over again.

Well, that's the stuff I'm hearing from the night crew. At least they don't take head breaks until there's glue smeared under the sticks and the bolt buckets are planted firmly on those twisty, warpy sticks first. Thanks for small favors guys.

Well, when the day crew finally came back to work, they claimed they'd been up early plowing snow. Then they claimed that they hadda go to the grocery store because Kate said there wasn't anything for dinner.

But at least, before they ran off on that errand, one of those guys got a picture of *Strumpet*. He claims he had to lean waaaaaaay over from a step stool and try to get the boat not looking like it's all twisted up. I should remind him about the scaffold.



Seems the guys have a new name for my bonkers project. Seems they are gonna turn it into a subdivision. And call it "Tigerwood Acres."

Maybe so. Wait'll I tell 'em about the cedar strips that go on the interior hull sides. Oh yeah, and the rail and style doors up under the foredeck. That'll get everybody excited. Can't wait.

Strumpet Project Catching Our Breath

Well, it's been about a work week since I started sort of timidly pulling this hapless boat apart. Back then I only had vague notion of how things should go together. Since then a great deal of noise, bags of dust and chips and a few usable pieces have come from what once were beautiful trees.



I thought it would at least be momentarily entertaining to share with you some of the more intricate elements of this prodigious effort. First, the carefully drawn out plan of action. Detailed scale drawings and engineering studies are all posted in this, the Design Center. Of course, each prospective employee, skilled artisans all, must answer the timeless question posted above.



Also, this project requires many hours of careful matching and scrutiny of each piece for color, texture, grain figure and, above all, perfection of machining. This small collection has been precisely stacked and painstakingly organized for the next extremely accurate fitting process.

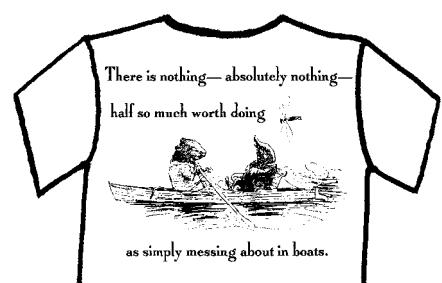
And quite remarkably, by some chance miracle of prestidigitation, much of this stuff actually has gotten glued, and nailed, and in other manners stuck down in a more or less pleasing fashion.



Until, at the end of the weekend, at the end of the first working week, at least one side of the cockpit is more or less covered over in real wood and awaiting gallons of varnish and #220 grit.



Oh yeah. Did I tell I've got this really cool idea for bright finished seating? Contour benches out of cedar staves. Almost next. Just as soon as the engineering drawings get posted, that is.



Simply Messing About In Boats Shirts & Tote Bags

**Featuring Ratty's Beloved Quote
from *The Wind in the Willows***

See our classified ad for
additional information

www.messingabout.com

Isaiah Szczecitiski and I are mentee/mentor in a program offered by the local school in town. Isaiah is in sixth grade at Robinson Elementary School in Starksboro, Vermont. He is 11 years old. We have been working together once a week for the past three years. Each week (for one hour) we worked on a project, a game, a model plane, dragon, ship or something else (and eat lunch). Sometimes these took several weeks to complete.

Last summer I figured that we should meet during his summer vacation and we should build a skin on frame canoe. During the summer the one hour turned into about four hours per week, sometimes a lot more, sometimes less. The canoe we chose was the Yaquina canoe designed by Andrew Linn (www.andrewlinn.com). It goes together fast once all the parts are ready.

If we could have spent every day together it would have been done in less than two weeks, but I work fulltime at IBM Microelectronics so that didn't leave much time for us to get together. I've already built two of Andrew's canoes, the solo Yaquina and the tandem Willamette canoe. The plans came from <http://toledocommunityboathouse.com/plans/yaquina/index.htm>. I'm not a professional boat builder, just a guy who loves doing things.

We started before school let out, transferring the plans from paper to $1/2$ " plywood, using carbon paper between the plans and wood. A day (or so) later, we cut them out using a jigsaw. So simple anyone can do this. A friend of mine gave me wood for the stringers, keel, decks and paddle. My brother-in-law gave me the material for the skin so the canoe cost me a quart (or so) of oil based spar varnish, one sheet of $1/8$ " water resistant lauan underlayment, some SS screws, wood glue "TB3" and a spool of artificial sinew from the craft store and one summer of my spare time. We took our time, giving reasons for each step so he could understand the "why" of building this way, lighter, cheaper (?) etc.



Mahogany keel with attached plywood stems, screwed/glued with TiteBond III (TB3) wood glue. We learned that mistakes can be corrected and they add character. There were several (all my fault), sadly no photos. Cutting out the plywood was simple, it took Isaiah some time to learn control of the jig saw.



Isaiah and Stephen Build a Canoe

By Stephen Ahern



The frame edges were then painted with TB3, three coats.



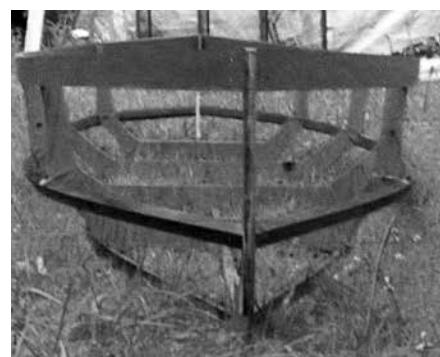
The mahogany stringers were cut with a table saw, then power planed to size. We varnished and then sanded (by hand) each stick.



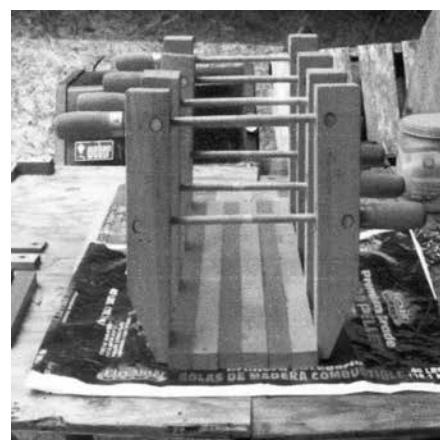
Once we had the materials ready the fun began, assembling the boat. The build took place in my backyard starting with the strongback (a 16' long 3"x6" on sawhorses with a 1"x6" leveled and screwed to the top, leveled and stable. The keel was placed on this and held down with angle brackets that were screwed to the plywood frames, then to the 1"x6".



The two outer gunwales were held in place along the top of the frames with hand clamps and then screwed and glued to the stems. The four stringers were clamped along the frames, cut to size and screw/glued to the stems.



Then the entire boat was removed so we could tie each joint with the sinew, which took several hours.



The decks were made from 1" oak and mahogany glued/clamped until dry.

WEST WIGHT POTTER OWNERS WEB SITE

Technical & Modification Data

List of Potter Owners Worldwide!

Great Sailing Stories & Helpful Tips

No Dues.....Just Information!

www.wwpotterowners.com

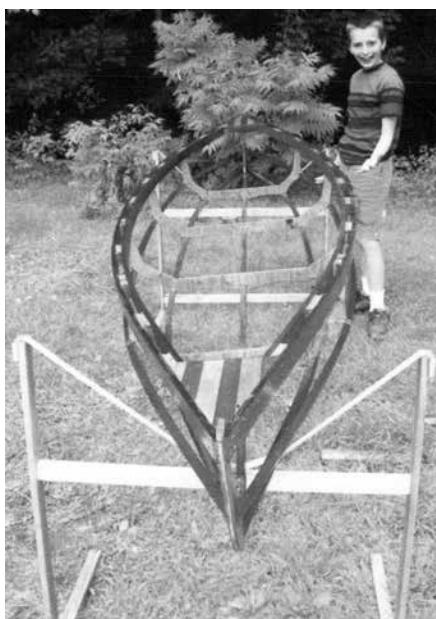


While the deck blank was curing we added the inwales and special 1" spacers along the inside of the gunwales to make the boat stronger. On either side of the tops of the frames the spacers were cut in half (and shortened) to keep them each the same length along the full length of the gunwales.

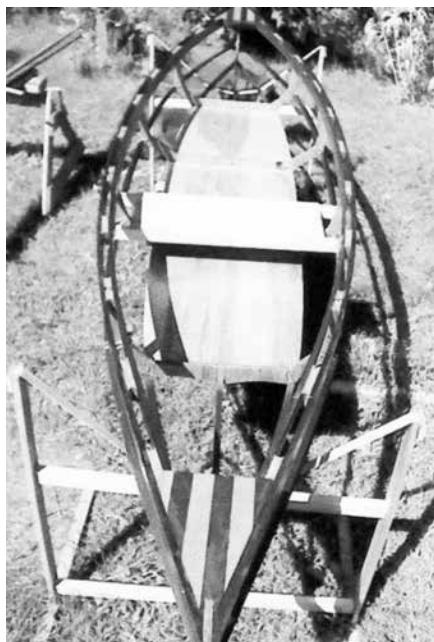


Notice the ends of the spacers. They were cut to length with a drill press to make the "negative space" look rounded.

The boat was transferred to special stands for the rest of the build.



The lauan was cut to fit between the frames, along the bottom stringers, varnished (three coats) and then tied with sinew at each corners.



The seat was crafted from the same lauan, screwed to 1"x2" pine sticks, tied to the middle stringers with sinew, and varnished (three coats) and then centered on the rear middle frame.



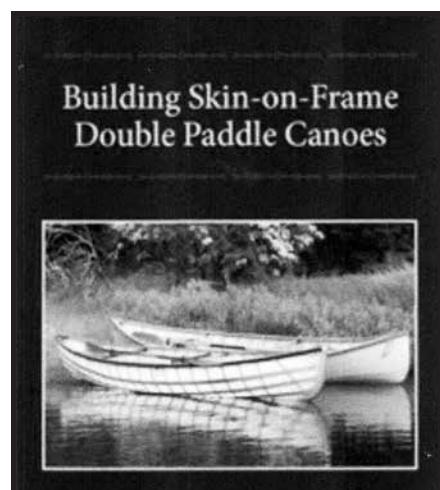
To skin the canoe we used waterproof PVC coated polyester cloth (my other SOF canoes were skinned with polyester, then varnished to make it waterproof). The only drawback, it doesn't stretch so it is difficult to make the skin tight along the gunwales and it looks wrinkled, but doesn't affect the handling.



A rub rail was screwed to the frames to protect the skin and hide the stainless steel staples. Two strips were added to hide the staples along the stems. A nice paddle crafted to fit, made from mahogany and pine, design by Andrew Linn.



Here is the finished boat on the water (a small lake in Vermont, Lake Iroquois). The canoe and paddle belong to him now.



HILARY RUSSELL

A valuable book for building any skin-on-frame canoe, kayak, or rowboat. Plus the chapter on using willow for ribs connects ancient techniques with modern materials and design.

"inspiring...very clear and concise... elegant simplicity..."

Iain Oughtred

"...a logical progression...a good bibliography... and a list of sources".

Nim Marsh, Editor, Points East

"...graceful and beautiful craft."

Matt Murphy, Editor, WoodenBoat Magazine

"Hilary Russell...has demonstrated...how to build a vessel that combines beauty and practicality to a degree rarely achieved." **George Dyson, Author of Baidarka**

To order Visit
www.berkshireboatbuildingschool.org
 plus plans, parts, classes and more

I am two months into construction of my latest project, building a 16' strip built Adirondack Guide Boat. I finished stripping or planking the hull just before Christmas. Next up was fairing and smoothing the hull, along with filling any dings or staple holes with an epoxy putty. More sanding and then a sealer coat of Raka Epoxy.

In early January I made a cardboard template for the bow and stern stems. I traced the shapes onto a couple of pieces of cherry wood and then proceeded to cut them out on the bandsaw. Brother Steve dropped in to give me a hand laying on the fiberglass cloth and epoxy. Over the next couple of days I rolled on three filler coats of Raka Epoxy. Then I took out the 6" random orbital sander and smoothed out the sags and drips in the epoxy fill coats.

Next I'll probably go over the entire hull one more time with the random orbital sander with #80 grit. Hopefully, if I can grab brother Steve, we'll pull the hull off of the molds, sit it upright and start the scraping, sanding and fairing of the interior of the hull.



I made a cardboard template for the bow and stern stems.

I traced the shape onto a couple of pieces of cherry wood and then proceeded to cut them out on the band saw.



20 Mile Boat Build

(Continued)

By Richard Honan



Truing up the shape using a stationary drum sander.



Dry fitting the cut out stems.

A final sanding of the sealer epoxy coat.



Brother Steve giving the hull a final vacuuming before we apply the fiberglass cloth and epoxy.



Laying out the fiberglass cloth.



Smoothing out the wrinkles in the fiberglass cloth.

Squeegeeing the fiberglass cloth.





With the 6" random orbital sander, I smoothed out the sags and drips in the epoxy fill coats.

An Inquiry from Lou

It is with eager anticipation that I follow your progress on this boat. I would like to ask about the differences of this construction/design vs that of many other rowing boats of this size/dimension. The fact that the front and rear stems are added after the fact vs being an integral part of the hull says a lot about what they are there for and how they are used. In my opinion, adding them at the end means they are easily removable without damage to the remainder of the hull, and thus likely have been designed in that way as they

Our Goal

Our long term goal is the establishment of a living history museum and a shipyard accurately depicting the lives of individuals participating in the Mathews shipbuilding industry during the 19th century.

Who We Are

The Mathews Maritime Museum is owned and operated by the Mathews Maritime Foundation. Established in 1998, the Foundation is a non profit organization dedicated to preserving, protecting and displaying examples of the rich and extensive maritime heritage of Mathews County through research, conservation, documentation and education.

About Mathews Maritime History

The building of sailing ships in Mathews began in Colonial times and the Revolutionary War increased the need for them. Shipbuilding was the major industry of Mathews from the American Revolution until the Civil War. Schooners were the workhorses of the Chesapeake Bay beginning in the 1700s and many were built up to 1900. Before the Civil War more sailing vessels were built in Mathews County than in any other part of Virginia.

According to research done by historian Peter J. Wrike, there were at one time at least six shipyards on the East River. Before 1860 shipbuilding sites also existed on Blackwater Creek, Cobbs Creek, Garden Creek, Winter Harbor, Milford Haven, North River, Pepper Creek, Pointe Breeze, Put-In Creek, Sloop Creek and Stufts Creek.

The shipbuilding trade often passed from father to son for several generations, including the families of Gayle, Billups, Miller, Hunley, Ashberry, Smith and others.

In addition to the building of ships, many Mathews men made their living on the water as merchant seamen, watermen, and in the nation's Navy. It is said that in ports around the world rarely did a US ship come

Mathews Maritime Museum

PO Box 1201, Mathews, VA
(804) 725-4444
www.mathewsmaritime.com



in that didn't have at least one Mathews County man among her crew.

Sponsored Events Maritime Lecture Series

Open to all and held the third Thursday of the month from September through May at the Mathews Memorial Library. Home-made refreshments and good conversation following the lecture add to the enjoyment. To receive advanced notice of lectures, send us your email address.



Family Boat Building

An annual event. It's a means to get families involved with the Museum and to learn about boat building and the boat build-

ing heritage of Mathews County. This event stresses interaction and cooperation among participating families and groups. It is not ten families building ten boats but rather ten families seeing that ten boats get built. Family and group members develop a strong sense of pride in each other As they see the value of each person's contribution to getting the task done.

Richard Replies

You're very observant and correct. Traditionally the stem and the cutwater were one piece with a mortised out area where the planking would sit. In all the boats that I've built over the past ten years, I have built them with a two piece stem, an inner stem and an outer stem or cutwater. You're correct about the outer stem being replaceable or sacrificial. Sometimes the outer stem or cutwater would just be screwed on with the idea that if it got banged up or damaged over time, it could be replaced.

The Adirondack Guide Boat even has another twist on the bow stem. It is also called a "beard." This is from my friend Tom Barry:

"First off, the term "Adirondack" is literally Native American for "Bark Eater," both a term of derision and an accurate assessment of the lack of food sources and poor hunting opportunities. "Beard" may have come from early canoe construction, birch bark laced with rawhide and sealed with pine resin, the bow would be subject to abrasion in normal use and a piece of rawhide or even a pelt was sometimes laced around the bow to reduce damage."

ing heritage of Mathews County. This event stresses interaction and cooperation among participating families and groups. It is not ten families building ten boats but rather ten families seeing that ten boats get built. Family and group members develop a strong sense of pride in each other As they see the value of each person's contribution to getting the task done.

Antique Boat Collection



The Foundation's Antique Boat Collection consists of three boats; *Towboat*, *Green Heron* and *Peggy of New Point*. The *Peggy*, a historic Mathews deck boat, was renovated at the Gwynn's Island Boat Shop in 2013 and serves as a floating exhibit and teaching resource.

Mathews Maritime Heritage Day

This event, held annually on the last Saturday in September, showcases the maritime arts. Exhibits by local artisans demonstrate various maritime related trades such as crab pot making, boat building, scrimshaw art, model boat building, nautical knot tying and story telling by merchant seamen.

There has been a whole lot of interest in building these simple light foam boats I've been talking about, so much in fact that the things are sprouting like mushrooms here at the shop. I'll attempt to show you how it's done and how much fun it is. My goal was to make a 14' kayak that was light enough to wear as a hat, be extremely stable so I'm comfortable at all times and be indestructible in the extreme, as in throw it in the swamp for a year then pull it out and have it be in the same condition as it went in. We're even thinking about building a full size boat using this same "stacked" foam method. Imagine a 16' Melonseed that's solid foam except for the cockpit and it won't weigh anything cause it's basically made out of white air.



This is one I did last week, it's all glassed and painted and still only weighs about 20 pounds, center console and all. It's 14' long. There's only one layer of 6oz cloth covering the foam but that's all we need, the boat is solid foam, there are no open places under the decks. I did drop this one on the sharp edge of a ladder and poked a hole through the glass and dented the foam under. I just mixed up a little thick epoxy and filled it up, stronger than ever. This one floats in about a 1/2" of water, even with my fat ass in it. We can put it sideways to the shore and step in without getting our feet wet while it's floating.



These things have even attracted the attention of some "real" boat builders and they don't get any realer than these two. Here's me talking to Charlie Morgan and Tim Horsman. It just seemed to be too simple to be for real so they had to see for themselves. I think it's the extreme light weight and being impossible to sink that interested these two and they did bring beer, lots of it.

From the
Tiki Hut
By Dave Lucas

More Simple Foam Boats

By Dave Lucas
From the Tiki Hut



Helen said that we really need a bigger one for the two of us plus Cessna and Tuck dog so here I go on a 16 footer. It doesn't take much to get me started on one of these. We get this 2" thick foam at Home Depot for under \$20 for a 4'x8' piece so that cost is nothing, this boat took four pieces. We just draw out our basic shape and cut it with a jig saw, it's like cutting air. This one is stacked four layers high plus a "doughnut" on top.

We don't have to use full pieces of foam for everything, we can piece it all together with the scraps, just spread the joints out. It took me about three hours to lay out and cut these pieces. After we have all the pieces cut to a halfway good fit we need to stick them all together. If we're smart we will have labeled each piece. You're not going to believe this next part but I swear it's true, it took me ten minutes to glue the whole thing together. I started and finished before Stan could drink a beer.

I put a 2" piece of foam under the ends to get some rocker. To glue them together I just dab little dots of PL Premium 3X all around about 6" apart and jab in bamboo skewers from the grocery store to hold them together, not letting the glue come out to the edge or it'll be hard to get a good sand edge. Anything harder than the foam screws us up. This glue holds it all together til we glass it. This is the best glue we've found to use, we've tried lots of others including the "foam" adhesives. It comes in caulking gun tubes for about \$4 each.



Beware, lots of things melt this foam, spray paint, paint thinner, alcohol, Bondo, other types of resins. Spackling doesn't seem to like to dry when used as a quick and easy filler. Anything hard at the surface will screw up the sanding. Fairing and sanding is fun and easy and the sandpaper never wears out. Glassing is the same as always, messy and picky, only this time we have to do an extra good job because sanding the rough edges may go right through the foam next to it.



Here it is all smooth and glassed with a couple of layers of epoxy on, I added some blue tint to better see what I was doing. After I put the seats in and took some measurements, I realized that it's not long enough for us and the dogs so I took the saw and cut it in half and added a foot, no big deal and it'll actually be stronger than before because of the overlaps with the new glass. There was a visitor standing there watching when I cut it and I thought he was going to faint. Now it's a 17' double kayak.





Here it is about finished except for the center consoles, I'll put them in tomorrow. The boat without the seats weighs about 20 pounds, these super seats added another five pounds each but I think they'll be worth it, they fold down and are really comfortable, which is what may get me out in it. Yes, the paint is still house paint, gloss exterior for all of the boats. The new acrylic paints are really good, we've had some of it underwater for months and months with no ill effects. I don't know if it matters but I like Sherman Williams.



While I was doing the big double a girl showed up with Stan, took one of the other foam boats out and immediately had to have one. She had never been in a kayak in her life. We don't normally let people, especially strangers, come and work in the shop (in fact, never) but when she said that she was from Montana and didn't know shit about boats or water or anything and had never even seen fiberglass we figured she would be perfect for some good entertainment. And she had beer. She had to be out in a week, finished or not. Don't forget our motto, "Your Catastrophe is Our Entertainment." That comes right in front of "We Don't Do Shit if it ain't Fun."



Much to our surprise Tana knocked this one out in four days. She was no fun at all, didn't screw up a single time. She wanted a big 16' single to handle her dog and coolers and such. She did it 100% by herself with only a little instruction from me, she especially enjoyed shaping the hull form.



Then Stan said "hell, I think I'll make one only this will be a wider stand up, sit down self draining all round fun thing" and here it is. Now we all have to do one like this only make it look like an alligator or dolphin or something.

All of these foam boats you see here didn't exist seven days ago, that's how easy they are to make. They cost about \$125 in materials, five or six yards of glass cloth and about a gallon and a half of epoxy does it. Remember that when the shop/garage is totally filled up with a zillion little foam particles all we have to do is open the door and blow it all out into our neighbors' grass.



Wanna Try This?

By Bob Hicks

Dave has described pretty completely how he builds his ultra light kayak, but if you want to get more detailed instruction there's a website that goes into a lot of detail on it: <http://www.instructables.com/id/Foamboat-construction/>. I have extracted a few basic bits from it here to show you what is on offer.

"Go from sketch to model to full size solid boat hull in easy steps using my FOAM-BOAT method, a way to shape a mold that will yield smooth, symmetrical and repeatable results for those of us who do not have a sculptor's eye. I developed the technique for making long, narrow solid boat hulls, but it could be adapted to make all kinds of shapes and molds for other purposes.



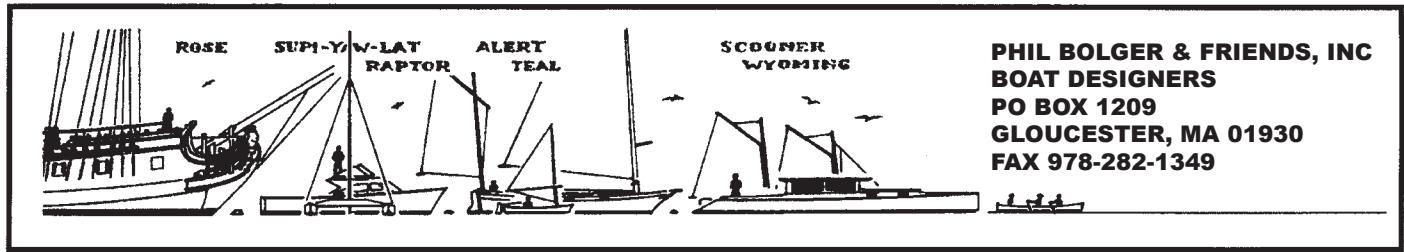
The model is assembled using wood construction glue. Rubber bands keep everything in place until the glue dries. I use scraps of any rigid foam for the models, but when building full size hulls I buy white expanded polystyrene, one pound per cubic foot density.



The curvaceous hull shape is revealed by cutting away the excess foam using a hot-wire cutter, sliding the wire lengthwise along adjacent pairs of wood edges in turn. The full size hull uses the exact same process with the components scaled up from the original small drawing.

One finished mold and a twin after it has been fiberglassed and painted with white exterior latex house paint.





**PHIL BOLGER & FRIENDS, INC
BOAT DESIGNERS
PO BOX 1209
GLOUCESTER, MA 01930
FAX 978-282-1349**

Here for a change of pace. All sorts of heavy lifting is unavoidable in building and using boats as we've seen in this column, for instance, in the context of the SACPAS-3 Boat Building Project. And outboards are amongst the more demanding items to man-handle. Typically we want to keep as close to complete control as we can moving them about, putting them on boats, taking them off boats, hauling them around just by themselves. Here two recent episodes, either one approached with due fretting, planning and preparations, all based on a healthy aversion against getting badly hurt, damaging the outboards or the boats.

The Yamaha T-50 on our 16' Shavere Design (#518) had been hanging on her stern since new around 1995. Now, however, the outboard was to be used temporarily on another project and thus needed pulling off her, not a casual matter at 240lbs of outboard weight.



T-50 #1 shows the unit hanging from her two lifting eyes via a chain off a 1,500lb hand cranked worm gear winch bolted to a small gantry assembled of two bays. On this sloping property, the boat had been parked on the sole level area, a tight spot of course (!), with the gantry carried into position in two pieces, plus the cross beam, then assembled and put to work lifting the outboard slowly and carefully off the motor board.

Phil Bolger & Friends on Design

Heavy Lifting of Sharp Edged, Fragile, Expensive Mechanical Contraptions, Smaller and Bigger Outboards



As T-50 #2 shows, the boat was pulled out of the spot, leaving the outboard hanging.



T-50 #3 explains that the boat was on its way being pulled by two ton winch up the hill to a temporary spot near the house out of the way for the winter. Note the old van positioned to serve as a crash barrier should the winch brake or something else fail, yet another attempt to avert injuries and damage, this time to passing folks and cars in the roadway below.

In T-50 #4, the outboard is lowered on to the 1,000lb utility trailer with the old carpet remnant softening the contact between motor's precious aluminum castings and the trailer.



After only about a 40' trailer ride, in T-50 #5 the outboard has come to hang off one of Resolution's (Design #312) two catheads that usually carry two 75lb CQR plow anchors. With more than triple that weight now, a 4"x4" was added with a 1/2" galvanized eyebolt to then shackle the outboard to. With that worm gear winch unbolted from the gantry and now bolted to that 4"x4", the outboard was hoisted up against that eyebolt to receive that shackle. Since the hood would not fit with the motor hanging there, a heavy gauge plastic bag would have to do to keep the worst of the elements off that nice 930cc four cylinder engine block. From here, the motor could readily be lowered to be put on to the other project later. For a number of reasons, the other boat could not be slid under the gantry to hang the motor. More at another time on which boat that motor would come to hang.

SACPAS-3 (remember her?) would need a 225hp three liter V6 to do high speed work, more on that project's saga in another piece as well! Here, the focus is on getting one to her and hanging it on her transom, a fairly serious challenge considering that motor's 530lb heft.

225 #1: Yes, that is snow, known to occur in these parts, no problem though for picking up the "beast" with that utility trailer.





225 #2 shows why, unlike any pickup truck, only that low trailer would work to exactly position the motor under SACPAS-3's stern extensions.



225 #3 has the lifting eye screwed on the crankshaft, with the 1,000lb AC electric winch's cable hooked on.



225 #4 documents how several cycles of partial lifting get to test the setup and my assumptions.

Let me explain the geometry. The sloping ground did not permit putting one of the two big SACPAS-3 gantries into that location. Neither would a forklift have worked on that ground and with that stern brace in the way. However, I still needed to lift the outboard vertically off that trailer but then move it against the transom into its exact position, all under full control, ready to stop, if not reverse the process at will without injuries or damage.

The solution chosen would use the massive motor board to slide two carpeted folks over, built up of 2"x4"s and through bolted. Each of the two forks had one big strap hinge bolted right in between everything. To the upper half of each hinge was bolted a U frame of 4"x4" legs reinforced in the corners to the horizontal beam with 2"x4"s. To that top beam rear face, the 1,000lb electric AC hoisting winch was bolted with (again) that 1,000lb worm gear winch bolted to the bowward face, to control the tilt aft of the U-frame(?!). The next pictures will make this clearer.



225 #5 shows the outboard pulled right up against the electric hoisting winch.



225 #6 illustrates how that U frame is leaning aft around 25°-30° to allow a clean unobstructed vertical pull of the hoisting winch. On the U frame's forward face, the worm gear winch pulls via a long nylon strap against a plain 2"x4" placed transversely way forward in her wheelhouse, where that temporary crossbeam has stout structures to rest against.



225 #7 shows how the U frame has been pulled vertical with the worm gear winch to allow positioning the outboard right over the motor board. Note that since the regular hand crank would immediately collide with the near horizontal wire, it had to be replaced with a ratchet to turn that shaft, slow but still effective, no need to rush things doing all this for the first time.



225 #8 from the other end shows the carpeting between motor and transom to allow multiple ups and downs and sideways to get the outboard in the approximate position on centerline.



225 #9 taken next day may clarify the geometry of the tilting U frame some better yet.

225 #10 addresses the obvious question of how to get the outboard out of the trailer's stakes. Not wanting to disassemble those bolts holding the rear stake panel, I lifted the whole stake assembly out of its sockets and gradually eased the trailer forward while the stake assembly was forced off the trailer's flatbed. Had I been more careful, I would not have broken one tail light lens when a stake snagged it.



Incidentally, and most fortuitously, the bolt holes drilled and epoxy lined so long ago did unexpectedly come to exactly match those on this older motor as well. So, on with the temporary skinnier galvanized bolts to tack everything in place reasonably securely, to then allow ordering in the exact size stainless bolts.



225 #11 shows how the U frame assembly had to match the transom, the outboard's width and height, and the A frame that supported the tarpaulin during that rainy day when this heavy lifting had to be done. Keeps snow out as well.

Whether you have an interest in traditional boat building, messing about in small boats, or helping to preserve our maritime heritage, come join us and share the camaraderie of kindred spirits. We invite you to attend one of our meetings, go for a row or get involved with our next boat building project. Visit us at TSCA.net/JohnGardner or on Facebook or email me, Bill Rutherford, at Smallcrafter@gmail.com. Feel free to contact any of our officers personally or stop by the Boathouse, we are often there Friday evenings. The Community Boathouse is Building 36, next to the shore entering the campus of the University of Connecticut at Avery Point.

In addition to maintenance on club dories and individual projects, our primary build is a traditional flat bottomed skiff for row and sail. Designer John Atkin describes his "Nina" design as a "practical and useful boat" that "despite her modest dimensions is very much a little ship." She "is a boat that will sail safely in rough, windy weather in confidence and with lots of fun." Her dimensions are 11'4" overall with a breadth of 4'7" and 4 1/2" draft. She will "carry a cargo of two heavy persons nicely or three average sized youngsters." Marine plywood is used for her bottom since she may reside part time on a trailer. Her topsides are nice, clear cedar. Framing is fir, the stern knee a grown crook and mahogany seats are planned. Other framing is what we find around the shop.

In December, with a full crew on a Friday night, we popped her off the mold and flipped her right side up. Her strong sheer and strong shoulders are very apparent. Now the frames and knees are going in. The rig

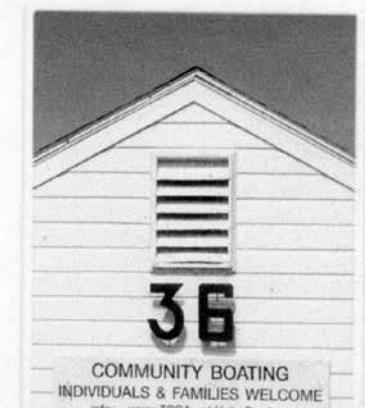


225 #12 shows one more time what is so often the case. The boat's 39' expanse shrinks the mighty motor down in size. However, even if seemingly smaller suddenly, 225hp should still be adequate.

Now, why on this newly constructed boat this motor is clearly a vintage/older unit will need explaining. But not in this issue. Here the heavy lifting is purely a matter of physics.

JGTSCA

**John Gardner Chapter
of
Traditional Small Craft
Association**



Welcome to the John Gardner Chapter of the Traditional Small Craft Association



is started, the mast has been cut and made round. The boom and gaff are cut to size and ready for jaws.

Next we will design and cut the sail. We have an old sailmaker's hand copied book full of rules of thumb as a guide. We plan to rivet the topside planks between the frames. That will be a good Friday night activity. We also have a small group working on Wednesdays with time out for Chinese at lunch.

George Spragg is leading the boat building with Andy Strode and Rob Pittaway assisting. Bill Rutherford the rig with Karen Rutherford to sew the sail. Ray Cormier has donated the sail cloth. John Symons has the rudder centerboard. Friday it is all hands on with lots to do.

Home Shops

Peter Vermilya has his Delaware Ducker all lofted, the stem mold constructed and is cutting hardwood strips to glue up the stems. Will be a beautiful boat, both rowing and sailing.

Bill Armitage is putting the finishing touches on a beautiful 16' double ender he built this summer at the Boathouse. It is a John Gardner design (no relation) from Canada (www.ciuideboat.ca). It is light and fast, as he proved rowing one in the Blackburn Challenge.

Mystic Seaport Boat Livery, under the able leadership of Jim McGuire, has two Beetle Cats (*Lisa* and *Elvira*) undergoing restoration in the Gray (John Gardner) Boatshop. *Lisa* is getting a new canvas deck while *Elvira*, with the help from parts from Beetle, Inc., is coming back from pretty far gone. In the Boathouse Shop, *Captain Hook*, a yacht Whitehall and *Waldo Howland*, a Culler Good Little Skiff, are getting their seasonal paint jobs. Meanwhile, in the water, L. Francis and Nat Herreshoff's designs *Araminta* and *Aida* are buttoned up for the winter as is the Crosby Cat *Breck Marshall*. Bob Baker's recently reconditioned *Peggotty* is nearby up on the hard after her first season sailing for a long time. Many Avery Point Boathouse people volunteer at the Seaport multiple days a week on these as well as other Seaport small craft.

Wayfarer *Hafren*

Reprinted from Dinghy Cruising, Journal of the Dinghy Cruising Association (UK)
dinghycruising.org.uk

by Phillip Kirk

Modifications made for the Round-Britain Challenge

Hafren sets out from Peel, Isle of Man, on a wide but tranquil sea. By this stage the modifications had been proved in practice

WE MADE A NUMBER of modifications to *Hafren*, a 15 year-old Wayfarer, to help us sail round Britain this summer in the record breaking time of 32 days 3 hours. Some of these changes supported our wish to sail at night and sleep on board underway; others improved reliability and made the boat easier to sail and more comfortable for long periods aboard. It is important to note that some modifications took the boat out of class but were necessary to support the style of sailing we wanted to do.

Which Wayfarer?

Early in our planning we experienced how the latest double-bottomed designs are more difficult to recover in a big seaway, post-capsize, as upwards of a tonne of water rolls across the floor. For this reason we went for the Plus-S, with its fore and aft buoyancy tank layout and its inherently buoyant foam sandwich construction. Large access hatches were fitted professionally, in place of the inspection hatches on what was a race-prepared boat.

Sleeping On board – Removing the Thwart

This was the most significant piece of boat surgery undertaken, to provide more space above the floorboards for sleeping underway. We had found the thwart was too low to sleep under in full offshore gear including a safety harness, giving a



sense of claustrophobia.

In place of the thwart I made and fitted a 50mm diameter carbon tube just below deck level that extended through the deck moulding to the hull on each side. This was connected to the centreboard case by a stiff box made from sections of carbon/foam plate. The outboard ends of the thwart were left in place and attached to the tube to provide somewhere to mount the genoa sheet cleats. Forward of the tube I removed one of the seat battens which allowed a shoulder-width sleeping space. Two layers of camping mat were glued to the floorboards to provide some comfort. The toe straps were attached to the floor with karabiners to allow easy removal for sleeping. This did mean no hiking for the helm when the crew slept to windward. Sleeping was prioritised above rowing which would have been impossible without a thwart. Instead we took long-shafted paddles which fitted neatly along the side of the centreboard case.

Spray covers

Port and starboard canvas spray covers were fitted to the washboards and could be rolled back to cover the upper half of a sleeping person. Our influence came from one of Frank Dye's books. The spray covers were also good at providing shade from the sun or to keep spray off while navigating or making lunch.

Cooking under way – Gimbaled Stove

The stove was another Frank Dye-influenced item. Our version included a primus gas burner in the bottom instead of a petrol one and was built in aluminium, not steel. The burner heated the mess tin above for which we also made a lid. The whole stove was gimbaled below the end of the thwart and could be 'tacked' if required. We used cans of mixed gas which could be found in most camping and outdoor shops. It worked even with waves breaking over the boat, providing hot drinks and meals.



Stern Mooring Points

A simple adaptation was made from a rectangle of plywood with a loop of rope attached to it. These could be inserted into the side deck hand holds providing a means of attaching a stern line when mooring up. The size of the plywood board is important, too small and they could pull out. These saved the need to fit cleats which would have caught the main and spinnaker sheets. Best of all they were made from offcuts.

Stowages

We felt it was important to keep weight near the middle of the boat where possible and while we also put some items in the forward and

aft tanks, accessing them is more difficult and temporarily reduces the reserve of buoyancy which is not ideal under way.

Water was carried in 5-litre plastic cans which were tied up under the side decks (*top right in the photo below*). They were a tight fit and would not break free if the boat capsized. Other items were also stowed under the side decks. On each side of the cockpit I fixed webbing straps to take 2 dry bags (*centre of photo*). These bags provided a stowage for items which were needed quickly but which also had to stay dry. Under the foredeck the spinnaker bags became a handy stowage for items in frequent use but that didn't need to stay dry. These included the day's food, hat, gloves, cameras, phones, bread rolls (in their own dry bag) as well as the spinnakers.

Beneath we stowed buckets on one side and a cool bag on the other. The cool bag doubled up as a pillow and was perfect when half full.

Flush hatches were cut in the floorboards creating spaces to stow the anchor warp and chain, milk and beer. The bilge water kept the latter nice and cool. In the forward tank we carried the light stuff: a spare jib, two tiny tents and sleeping bags, each in their own dry bag. The aft tank contained the remaining food, and delicate items such as charts, batteries and chargers all in dry bags and then plastic boxes.





Mast head light.

At night it was important and reassuring to know we could be seen, so it had to be mounted high, on the masthead. We favoured an all-round white light over a tricolour plus local batteries, in a device hoisted on a burgee halyard. This item was purpose-made by a friend (Roger Morton) and incorporated a multi LED bulb powered by 3 x 3.7V rechargeable lithium ion 'Ultrafire' batteries. All the components were mounted in a Perspex tube simply taped at each joint. The joints allowed either the bulb to be disconnected or the batteries to be changed. The disk was fitted to protect our night vision. However, when this broke we found the LED did not project much light downwards. The unit ran for around 12 hours on one set of batteries. Hoisting it nightly was a two-man task but once in place it was excellent; one lifeboat crewman identified us as a fishing vessel!

Fittings, Rigging and sails.

Where possible fittings were minimised and simplified. Only the kicker was led back to the helm with the outhaul being adjusted at the inboard end of the boom and the Cunningham doubling up as the downhaul for the tack of each reef. Slab reefing lines were run outside of the boom through cleats and then a turning block at the inboard end making it possible

to pull in the reef from all angles.

Various turning blocks were attached to the hull by a length of Dyneema threaded through a hole in the deck, etc., with a knot behind to stop it pulling out. This form of attachment could easily be replaced and required minimal tools. We renewed the shrouds and trusted to visual inspection of the (double-becket) chain plates.

The carbon tube was used to mount the kicker cleats and spinnaker sheet cleats (seen in the first picture). It kept all the sail controls close together making it easier for one person to sail the boat.

I built a lovely over-size spinnaker pole on which we could fly an old generation 505 spinnaker. This worked extremely well, both downwind and reaching, and provided extra drive in light winds. The lower third of the mast was sleeved internally with an aluminium tube to help it survive the bending and buckling loads from sailing upwind for hours on end. We also added an Aero-luff furling genoa which made the job of reducing sail quick and straight forward for one person, and gave a decent sail shape even when reefed.

Rudder and Tiller

We did not carry a spare blade or tiller, relying instead on the rudder that came with the boat, which appeared to be strong. On the way around we did make a big effort to avoid stressing the rudder by reefing early and sailing upright. We kept our rudder down with a 4mm fibreglass sacrificial pin through the stock and blade. We were lucky enough not to hit anything, despite lots of close

rounding of headlands, but this system worked well and gave us reassurance.

And if we Capsize?

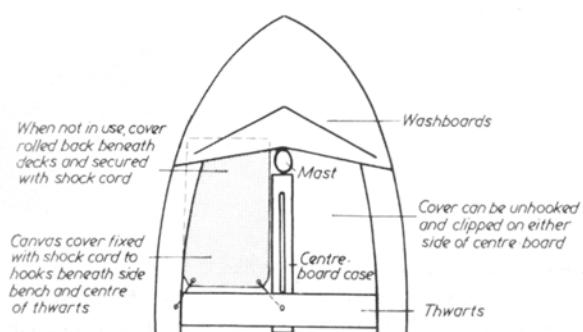
We fitted capsise recovery lines under the gunnels, retained by shock cord. When employed these extended as a loop about a metre outboard with the fixed and sliding strongpoints bolted through the gunnel and about a metre apart, making a big stable triangle to pull on. We practised capsizing in mid-December, wearing full kit, plus 3m tethers and with the boat loaded up, in 20 knots of wind and a building sea. We capsized the boat to windward on top of us, and let it turtle. It popped up with just one person on the board and recovery was routine.

In Summary

We spent 18 months preparing *Hafren*, our second Wayfarer, and read everything about Wayfarer cruising and we talked to experts (our thanks to Ian Porter, Ralph Roberts, Jenny and John Norman).

Certainly some of the above modifications are unnecessary for a day cruise or pottering round an estuary but they were essential for our challenge. We learnt that it is important to understand what you want to achieve and where equipment needs to live to do its job and what the priorities are, before modifying the boat.

With limited space you are going to have to make compromises. On the way around the UK everything worked and nothing significant broke, not least because we had benign conditions, with winds rarely even Force 6. PK



(Left) Frank Dye's Head Cover, made of waxed canvas in the early 1960s.

Drawing taken from *Ocean-Crossing Wayfarer*:

'Nobody can sleep with water on his face'

It's probably not what we want to hear, but the question is answered by the song, "Gone to Graveyards, Every One." Maybe that's a little extreme, or at the least premature, but from what I can tell that's the direction things are heading. People who love boats and boating are dying or getting too old to climb in and out of them, and the young people who are growing up in the digital age have other interests, for the most part. It's not just boats, but many hobbies and their related clubs and activities are in decline. People who had wonderful experiences with boats as kids grew up wanting boats of their own. Now those who grew up devoted to video games often continue to play some versions of them into their 30s and 40s. They may enjoy riding in your boat if you invite them, but their interests and priorities lie elsewhere.

Both antique boat prices and the general level of interest in purchasing them dropped sharply following the crash of 2008 and, from my perspective, there hasn't been much of a rebound. Most of the recovery seems to have gone to the super rich, and it is no surprise that the segment of the boating industry that caters to them is strongest. I recently read an article in *The New York Times* about their lack of interest in yachts under 150' as well as in the smaller six to eight passenger private jets which now are a glut on the market. Bigger is not just better, it's the only thing that's acceptable. For the rest of us it's a question of when, if ever, middle class actual earning power will increase, potentially bringing new enthusiasm to all aspects of boating.

With a few dips and spurts here and there, boating in America has enjoyed steady growth from the heyday of yachting, the gradual inclusion of more boaters with increased production of smaller yachts, through the boom of the postwar '50s and '60s when people decided they should have a boat. The idea that this is starting to finally come to an end is a radical one, and some people assure me that when the economy just gets better it will all be business as usual. I'm not so sure.

Boating industry magazines print hard statistics showing that the average age of boat purchasers and owners is increasing, but this just confirms what simple observation is telling us. Look at any of the newsletters of the antique boating clubs and you'll see that not just the boats are antiques. Almost without fail, everyone in the photos has gray hair. The next generation is nowhere to be found. In the clubs I work with, with a few notable exceptions, the children of even the most enthusiastic members are seldom very much involved. They will show up at an event that honors mom or dad, but we're still waiting for them to get their own boats and start to take over running the clubs. One by one we lose our leaders and sometimes there are no new leaders to take their place. I don't think we will vanish like the dinosaurs in one fell swoop, but it will become harder and harder to maintain a minimum level of activities.

We're already seeing declines in the number of boats at our boat shows with a subsequent drop in entry fees which are counted on to offset the fixed costs of the events. Boat clubs are well aware of the problem and trying the obvious like more advertising and asking people to invite a boater friend who is not a member, but the numbers don't seem to be heading back up.

The Antique and Classic Boat Society has instituted a "youth judging" program to try to get younger children actively involved

Where Have All the Boaters Gone?

By Boyd Mefferd

in shows. Last year at the Essex, Connecticut, show, one young person showed up. The ACBS officers, board members and committee people are business people, for the most part, many retired but still with a wealth of experience and abilities to make things grow. It will be a bitter pill to swallow for these volunteer leaders to have to admit that it just isn't happening, but I think that day is coming.

Antique boat prices have fared better than those for older fiberglass, but even models we thought of as "super desirable" have declined substantially from their pre 2008 levels. As owners pass away or sell because of failing health, a few families have the foresight to keep the boats as a part of their heritage, but many lack the means or the enthusiasm required to carry on. In his estate planning the deceased probably left suggested values, but when the current market does not support them, heirs are forced to get realistic. Many wonderful boats come on the market this way and the increasing volume of estate sales is driving prices down. Why restore a boat when you can go on the estate market and find something already done for a lot less money?

Once in a while I see something that is a truly novel idea to possibly expand the appeal of boating to people who might otherwise be missed. I'm not sure it was specifically designed with profound generational intentions, but a water slide rigged on the side of a pontoon boat sure got the grandkids out on the water and into the act. Whether their happy memories will translate or not remains to be seen, but it takes boating to the kids rather than expecting the kids to come to boating. A boating industry publication wrote up a dealership in British Columbia which focused on the Chinese Canadian population, and even sponsored a Chinese Yacht Club. They had Cantonese and Mandarin speaking employees and took boating to where the money was.

The fastest growing ethnic population in the United States is Hispanics, and another article I read in a trade publication proposed growing boating by more focus on selling to them. The gist of the article seemed more like, "Hispanics are taking over, so we'd better get with the program," but not so much on exactly how to do it.

The big problem I see is that, for the most part, waterfront property is in the hands of Anglo people and a lot more energy has gone into making Hispanics feel unwelcome than in letting them be included. Waterfront use and boating may not be in lockstep, but they are closely tied and I think a lot of things will have to change before many Hispanics will want to buy a boat and try to fit in.

Roads and highways, on the other hand, are undisputed public property and a whole culture of car restoration and modification, the "low riders," has long been popular in Hispanic communities. It's a culture and an art form, with creations every bit as beautiful as the most wonderful in their way as boats. The interest is there, the creativity is there, it's amazing, but it has nothing to do with boats.

In the overall population and the fashion industry, which is more focused on younger

people, for the past few years vintage runabouts and yachts were popular as ways to set a tone of elegance in advertising. Now, not so much. The recent George Clooney wedding in Venice provided the media with some fine shots of the beautiful people and shiny mahogany, but for the most part I'm finding that runabout backdrops for fashion ads just don't seem to be "in" anymore. I picked up a glossy men's fashion magazine out of the post office paper recycling recently and went through the 200 or so pages, finding the following props or backdrops: chairs 14; old cars 2; seaplane 1; boats of any kind 0.

Bicycles survived the introduction and development of the automobile and subsequently it seems that simple, human powered craft that are the subjects for so much in *MAIB* may actually become more popular at a time when there are fewer and fewer potential owners for mahogany runabouts and larger cruising boats. I know that there are younger people who love being out on the water, but with underemployment, student debt and increased living costs, are scared away by summer slip fees, winter storage, not to mention the initial cost of larger power or sailing craft. For them a kayak or canoe fills a need, and indeed around here it seems as if every third car has one or the other on the roof in mid summer.

As I write this dismal article from my point of view, I'm reading a glowing report about the recent Fort Lauderdale International Boat Show in a marine trade publication and wonder if I'm overly pessimistic in my outlook. Apparently the show featured 1,500 boats, almost 200 of them over 100' and things like 40' open boats with four 300hp outboards. I see photos taken from the air of acres and acres of smaller boats, shoe-horned in together with just room enough to walk between. Those in charge of the hype stopped just short of "better than ever," admitting that sales are up but still short of pre 2008 levels.

Then I think of the tale of the three little piggies and realize that the rebirth seen in Fort Lauderdale is built entirely on petroleum. In the past, \$4 gas has translated into \$5 gas on the fuel docks, and now with gas under \$2 in some places, is this enough to create a boom in power boating? Will the lower prices last, or is it just another example of how the markets can be rigged in whichever direction the major oil producing governments want at the moment? For boating, is it a boom or a bubble? If I knew the answers I'd be working in a think tank somewhere, not sitting here in Canton, Connecticut, by a phone that never rings.

The only thing I'm relatively certain of is that we're living in a volatile time and will see more and more substantial changes to the ways things always have been. Vast amounts of information are not only readily available, but they are shared back and forth and round and round by those who have grown up in the digital age. The smart phone seems to be ground zero and, at least to some extent, constant communication is the hobby and takes its share of spare time. There is no time for, nor interest in, collections of stamps or coins. Just like the boats, the most desirable ones appeal to the super rich and set auction records, but the rest just languish. Vintage cars and mahogany runabouts have set auction records too, but none of it translates down.

It doesn't make much sense to mope about the ways things are changing, but this

is one case where I'd be very happy to be wrong. The best I can offer are the words of Donald Rumsfeld: "time will tell."

About the Author

Boyd's Boat Yard, Canton, Connecticut
www.boydsantiqueboats.com

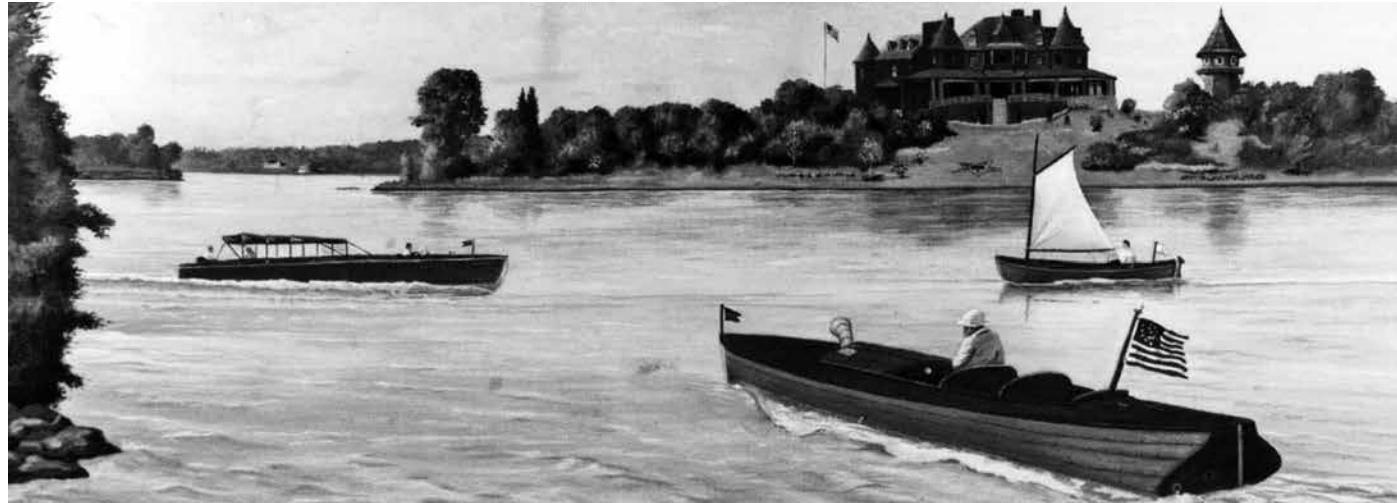
In 1981, Boyd Mefferd, then an internationally known sculptor specializing in large outdoor works, began restoring runabouts to provide variety in his work and to provide fill in projects between sculpture commissions. The antique boat hobby consisted of a small, but highly enthusiastic group, mainly amateur restorers, who were able to select

their current project from a wide range of available craft.

By the late '80s the hobby had become much more popular, more professional restoration shops had opened and Boyd had become "Boyd's Boatyard" with five people working on restorations. Boyd was purchasing runabouts, often neglected and in poor shape, from locations all over the US and Canada, and at one point there were 100 boats of all descriptions at the Canton, Connecticut, location. During the '90s interest in antique boats boomed and gradually there were fewer and fewer unrestored boats still left to be "found."

"Boyd's Boatyard" evolved into a full service sales and restoration facility providing maintenance for hobbyists not interested in hands on involvement and commissioned restorations for individuals who had a special boat needing work, often something with a long family history. Boat sales continued, featuring both restored and projects, with the inventory reflecting the ever decreasing availability of unrestored runabouts.

You will find no fiberglass boats in Canton, only wood, and because of a combination of philosophical and practical objections, Boyd has never traded in the recently manufactured reproduction runabouts.



"Arethusa"
N.G. Herreshoff designed Buzzards Bay 25
Built in 1996



"Edith"
L.F. Herreshoff designed Rozinante
Built in 1995

"Olympus"
Dick Newick designed for the 1980
singlehanded Transatlantic
Built in 1979

DAMIAN McLAUGHLIN JR.
BOAT BUILDER
Custom Boats and Yachts Since 1970

DAMIAN McLAUGHLIN JR.
P.O. Box 538
North Falmouth
Massachusetts 02556
508-563-3075
CORPORATION

Wood Construction and Restoration to 40'
Visit our new website: www.dmcboats.com

SHAW & TENNEY

MAINE CRAFTED SINCE 1858



Makers of the world's finest
wooden oars and paddles.

Gear and Hardgoods for Life on the Water
SHAWANDTENNEY.COM

Fouled cockpit drains can be problems if they are not straight run from the cockpit out the hull. Such drains can also be problems when the boat is heeled or bouncing in heavy seas and the water comes back into the cockpit. Many builders solve this in sailboats by having the port drain go to the starboard side (and vice versa) so that the water drains to the other side of the boat. If the builder used a 45° bend, the drain can be unclogged with a flexible wire. If there is a 90° bend in the system, another approach is needed when the drain clogs.

My neighbor's sailboat has the opposite drain system and one became clogged completely when the wire mesh strainer came adrift. We could not get it clear with a flexible cable, so he used my "plumber's helper" with the "sink plunger" attached. The device has one fitting for the commode and a second one for sinks. The sink fitting worked quite well. The drain was clear and running properly with a few minutes of work.

The marine press publishes stories from time to time about boats going aground (or being involved in collisions of some sort) on a clear day, good weather and all the other conditions that makes boating enjoyable. One example of such was when the Navy minesweeper *USS Guardian* ran aground on Tubbataha Reef. The minesweeper was supposed to pass by the well marked reef. One report on the minesweepers grounding noted:

...that a chart produced by the National Geospatial Intelligence Agency was inaccurate by up to eight nautical miles. This chart was used by the crew of the *Guardian* and played a significant role in the grounding. However, significant errors by the crew and commanding officers were also reported, including that they should have noted the inaccuracies in comparison to other charts."

The helmsperson steers the boat. Others should be keeping the required "proper



From the Lee Rail

By C. Henry Depew

lookout." Many people seem to think steering a boat is like driving a car. With the car, the driver is keeping track of what is in front, alongside and behind the vehicle for a limited radius with certain controlled conditions present. Frequently this is not the case with the person at the helm of a boat on the water. With the *Guardian* example, there is the question "was anyone looking ahead?" The autopilot, GPS and electronic charts are very nice, but the Mark I eyeball is still the final navigation instrument. And in spite of all the caution exercised, something may still go wrong.

At one time I needed an extension cord for my halogen spotlight which had come from a car with a cigarette lighter plug. The plug was not of any use on my boat and I needed some more length between the electrical fuse panel and where I wanted to stand when using the light, so I did some rewiring. I purchased an exterior AC extension cord of the proper length and cut off the male plug (leaving a little cord on the male plug for later splicing in the wires from the spotlight). The now bare end was modified to connect to the fuse panel. The cigarette lighter plug was removed from the spotlight wiring and the male electrical plug added. I could now plug in the spotlight to the extension cord and have the light available when needed. When not in use, the extension cord was coiled up out of the way. The setup worked quite nicely.

One of the 2.5lb dry chemical fire extinguishers on the boat had the needle in the "recharge" sector of the gauge. The extinguisher had a 1986 date on it. Since the boat was built in 1985, this extinguisher probably came with the boat when I purchased it. I called a local commercial fire extinguisher outlet about recharging the extinguisher. The

response was to replace it as it was "overage." Since I did not know that fire extinguishers had an expiration date, I found the response interesting.

After some research, I found that most extinguishers should work up to 15 years as long as the needle is in the "green" sector, but unless there is an expiration date (like on flares) or a manufacturer's date (like on mine), you might not know the age of the device. One of the sources concerning fire extinguishers noted that they should be checked once a year and there is the problem of the dry chemical part "caking" on the bottom of the extinguisher if it is stored vertically all the time. There is also the point made in my phone conversation that the cost to recharge the extinguisher may exceed the cost of replacement.

I learned to sail in an Optimist Pram in the early 1950s on the Manatee River. The boats were sponsored by local business concerns and carried their names on the sides of the vessels. The instruction was free and if one wanted to join the fleet the cost was minimal. Not only did the business establishments furnish the prams, they also contributed to the upkeep. I was quite upset when I drifted against the bowsprit of an anchored boat (light wind and a strong river current) and broke the mast. I was told not to worry, the replacement was covered.

At present, a local Optimist Club is working to create a pram fleet for local youngsters to learn to sail. The estimated cost for one built from a full kit (all the parts, rigging, sails, etc) comes to around \$1000 (various kits are available at various prices). I built a pram from plans and I can appreciate a kit with all the pieces cut and ready to be put together. It is still a lot of work, but "assembly required" is better than cutting out all the pieces from plywood (and hoping no mistakes were made in the process, one of which I made).

The Apalachee Bay Yacht Club has a youth sailing program using Hobie Holders and some of the members are getting involved in the pram project because the Optimist Pram is almost the perfect vessel to teach young people to sail. With luck, we will have a pram fleet operational by early spring. If your area (or organization) is considering promoting youth sailing, the Optimist Pram is a good choice for such an endeavor.

BUFFLEHEAD
15.5'x33' plans
for experienced builders

**HUGH HORTON
SMALL BOATS**
SOLID COMFORT BOATS
8471 SW CR 347
Cedar Key, FL 32625
huhorton@gmail.com

21st century cruising sailing canoe for savvy sailors
Photo by Bill Ling

Experience a Grand Utility Skiff from Hadden BOATS

- Fine Handcrafted Quality in Aluminum
- Custom Powder Coated Colors
- New and Demos Available

Grand Skiff 16
Beam: 6'-3"
1,600 lb. weight capacity

Info packet with photos and pricing

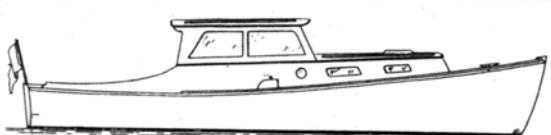
Hamilton Boat

Near the Essex Bay in MA

617-584-8641

innovationmatters@comcast.net

Hadden Boat Company Wooden Boat Construction & Repair



Launched September 2012
36' Vinnie Cavanaugh Replica
www.haddenboat.com
11 Tibbets Ln., Georgetown, ME 04548
(207) 371-2662

Pert Lowell, Co., Inc.

Custom
Small
Boats



Builders of the famous Town Class sloop in wood or fiberglass as well as other custom traditional wooden boats since 1934.

Mast Hoops

Mast Hoop Fasteners - Sail Hanks - Parrel Beads - Wood Cleats - Wood Shell Blocks - Deadeyes - Bullseyes - Custom Bronze Hardware

Pert Lowell Co., Inc.
Lanes End, Newbury, MA 01950
(978) 462-7409



Builders & Restorers

C. Stickney Boatbuilders Ltd.
15 Wiley's Corner Rd. St. George, ME 04860
207-372-8543

Custom Wooden Boat Building & Restoration



10/6" Yacht Tender Elegant
E-mail woodboats@msn.com
Blog
<http://blackguillemot.wordpress.com/>

Hansen & Company Builders of Practical & Impractical Boats

Gloucester Gull Dories & Other Small Boats
www.hansenandcompany.blogspot.com
Dennis Hansen 207-594-8073
P.O. Box 122 dgehansen@myfairpoint.net
Spruce Head, ME 04859

AREY'S POND

Cape Cod's
Sailing Headquarters
& Wooden Boat Center
Established 1951

Proud Builders of
Arey's Pond Catboats



14' Cat - 16' Lynx Cabin
16' Lynx Open - 16' Launch
18' Daysailer
20' Cruising Cat
21' Launch

Traditional Elegance
All boats built to the highest standards.
Hulls are wood or fiberglass with
teak or mahogany trim.
Solid bronze hardware,
Sitka spruce spars.

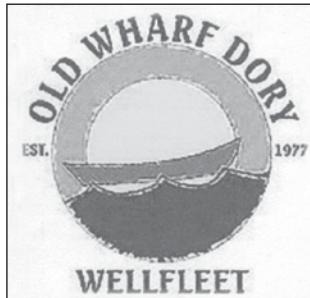
Brokerage Boat Sales
APBY Sailing School
Mooring Rentals and Storage

Box 222, S. Orleans, MA 02662
(508) 255-0994
www.areyspondboatyard.com

Quality Restoration and Repair



Southport Island Marine
207-633-6009
www.southportislandmarine.com



Wooden Boats Built to Order

Row, Power, or Sail - Phil Bolger Designs
Bare Hulls, Complete Boats
Lumber Yard Skiff Plans,
Shoal Draft Our Specialty
Check Out My Website
www.oldwharf.com
Or Give Me a Call at (508) 349 2383
Walter Baron, Boatbuilder
170 Old Chequessett Neck Rd, Wellfleet, MA 02667

Quality Restoration and Repair



Southport Island Marine
207-633-6009
www.southportislandmarine.com

YOUR AD HERE
\$9 / ISSUE

maib.office@gmail.com



(607) 547-2658

Tom Krieg's Boat Shop

(At 6 Mile Point on West Lake Rd.)
P.O. Box 1007
Cooperstown, NY 13326

Woodenboat Restoration & Rigging



It's Not Just Art, It's a Craft!

Unique Wood-Strip Performance, Sea Kayaks

Kits, Plans & Finished Boats

Send \$3 for a catalog to:
Nick Schade
Guillemot Kayaks
54 South Rd.
Groton, CT 06340-4624
ph: 860-659-8847

<http://www.KayakPlans.com/m>

Plans & Kits

Designs by Platt Monfort

STUDY PLANS BOOK \$4.95

**INSTRUCTIONAL VIDEO \$19.95
NOW ON DVD ALSO**

Monfort Associates
50 Haskell Rd. MA, Westport, ME 04578
(207) 882-5504
gaboats.com

PYGMY
BOATS INC

**VOTED BEST
WOODEN KAYAK**

Call for a **FREE** Catalog: 360-774-6397 | www.pygmyboats.com

WESTON FARMER BUILDING PLANS & ARTICLE REPRINTS

BUILD A WESTON FARMER CLASSIC DESIGN. 15 plans available for the amateur boatbuilder from 10' launch IRREDUCIBLE to famous 32' blue-water ketch TAHITIANA. Send \$2 for catalog defining specs, plans, contents, prices, etc.

READ & ENJOY A WESTON FARMER BOAT STORY. We have 20 article reprints on small boat designs written through the years by E. Weston Farmer, N.A., considered by many to have been one of the outstanding marine writers of all time. Delightful reading for only \$1 per page. All articles include line drawings, offsets, etc. that you can use. Send \$2 for catalog listing.

**WESTON FARMER ASSOCIATES
7034-D Hwy. 291, Tum Tum, WA 99034**

THE SIMMONS



Classics of the North Carolina coast 18-, 20- & 22-foot plans available

- ~ Outstandingly seaworthy vessels
- ~ 30 mps with low power
- ~ Light & simple; plywood lapstrake construction
- ~ Detailed plans & directions; no lofting



Cape Fear Museum
Wilmington, NC
910.798.4371
capecarmuseum.com

Robb White & Sons Sport Boat

Handy, pretty, proven 16'x43" strip planked skiff will plane two adults with 4hp. Full size mold patterns, complete instructions. \$75 Photos & specs at www.robbwhite.com.

**Robb White & Sons
P.O. Box 561, Thomasville, GA 31799**



**SEAWORTHY
SMALL SHIPS**

WOODEN POND MODEL KITS

SKIPJACK COASTER

DRAKETAIL

MODELS THAT REALLY SAIL
Rubber Band & Sail Powered Kits
Pre-Shaped & Drilled Parts
Brass, Copper & Stainless Hardware
Great Fun in Pool, Pond, or Sea • Order Yours Today
Order #800-533-9030 (U.S.) VISA/MC accepted
Other Kits & Plans Available, catalog \$1.00

SEAWORTHY SMALL SHIPS
Dept. M, PO Box 2863
Prince Frederick, MD 20678, USA

Visit our Home Page at
<http://www.seaworthysmallships.com>

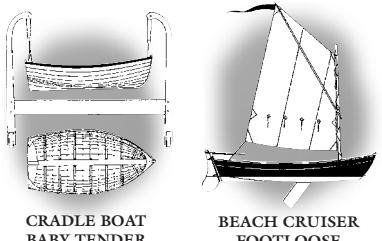
Jordan Wood Boats

P.O. Box 194, South Beach, OR 97366
541-867-3141

www.jordanwoodboats.com

Distinctive Boat Designs

Meticulously Developed and Drawn
For the Amateur Builder



The Penobscot 13, 14 and 17,
a 12 ft peapod, and other designs
for sail, rowing and power.
Plans, DVDs, kits, epoxy, sails and
more.

ARCH DAVIS DESIGN
37 Doak Road, Belfast, ME 04915
207-930-9873
www.archdavisdesigns.com

DUCKWORKS BOAT BUILDERS SUPPLY



low prices, fast service

www.duckworksbbs.com

- plans
- hardware
- custom sails
- epoxy/supplies
- sailmaking supplies
- tools and MORE

TOTO



13' x 30" DOUBLE PADDLE CANOE
TAPED SEAM PLYWOOD
NO JIGS - NO LOFTING
\$15 PLANS
\$1 INFO ON 18 BOATS
JIM MICHALAK
118 E. Randall, Lebanon, IL 62254

H.H. PAYSON AND COMPANY



Plans • Patterns • Articles • Books
Instant Boat Series • Downeast Dories • Model Building

Visit our website @ www.instantboats.com
Call, write or email for information or help with your project.

H.H. Payson & Company
PO Box 122
Spruce Head, ME 04859

Going forward in the spirit and tradition of Dynamite Payson.
Just Do It!

Dennis Hansen Boatbuilder

207-594-7587



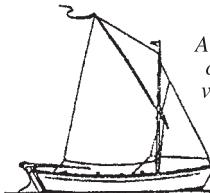
ATKIN

Atkin illustrated catalog. Containing more than 300 Atkin designs and new text. Famed Atkin double-enders, traditional offshore and coastal cruising yachts, rowing/sailing dinghies, utilities and houseboats. \$20.00 U.S. and Canada (post paid) and \$25.00 U.S. overseas airmail. Payment: U.S. dollars payable through a U.S. bank.

ATKIN BOAT PLANS

P.O. Box 3005M, Noroton, CT 06820
apatkin@aol.com
www.atkinboatplans.com

CONRAD NATZIO BOATBUILDER



A range of small craft plans for very easy home building in plywood

For details, visit the website:
www.broadlyboats.com/sections

or contact:
CONRAD NATZIO BOATBUILDER

**15 Lanyard PI
Woodbridge, Suffolk
IP12 1FE
United Kingdom
Tel +44 1394 383491**



**This Space Available
for Advertising
Plans & Kits**

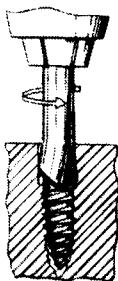
\$36 per Issue

**contact us at
maib.office@gmail.com**

Supplies

UNSCREW-UMS™ broken-screw extractors

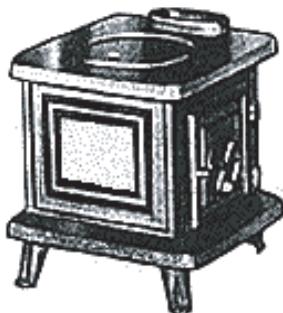
Remove damaged fastenings. Minimal damage to wood. Hollow tool uses stub as guide. Sizes to remove screws from No. 2 to No. 24, lags, nails, and drifts.



T&L TOOLS

24 Vinegar Hill Rd., Gales Ferry, CT 06335
Phone: 860-464-9485 • Fax: 860-464-9709
unscrew-ums@tltools.com
www.tltools.com

TRADITIONAL MARINE STOVES



CAST IRON
PORCELAIN ENAMELED
WOOD BURNING
HEATING & COOKING
COMPACT

NAVIGATOR STOVES

409 Double Hill Rd.
East Sound, WA 98245
(360) 376-5161

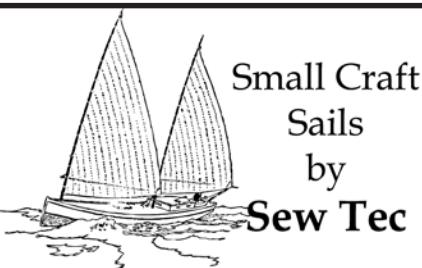
Atlantic White Cedar

Custom cut to your specifications from our own logs which we bring up from Florida. Lengths up to 24'.

Cypress and other species available upon request.

Woodcraft Productions Ltd.

P.O. Box 17307
Smithfield, RI 02917-0704
Tel (401) 232-2372 • Fax (401) 232-1029



Any Sail, Traditional to High Tech,
to 100 sq. ft.
Re-cuts, Repairs & Custom Canvas Work
In business since 1980 - sewtec.us
sewtec@hughes.net - 850-773-7929

YOUR AD HERE \$18 / ISSUE

maib.office@gmail.com



Sail for a Canoe

Excellent quality and design
\$329.00 plus shipping
National Sailing Committee
American Canoe Association
<http://canusail.org>

Free rig plans

Newsletter: *Canoe Sailor* \$ 6
E-mail: canusailor@yahoo.com

Pay to: C. Sutherland
Send to:
Chuck Sutherland
2210 Finland Rd.
Green Lane, PA 18054



16 Limerock St., Camden, ME 04843
(207) 236-3561
www.gambellandhunter.net

ATLANTIC WHITE CEDAR

Boat grade rough sawn flicthes in stock.
Most are 16' long 4/4 to 8/4 thick.
New supply ready to ship.
Call or write for info.

J.D. ENGLAND CO.
1780 Remlik Dr., Urbanna, VA 23175
(804) 758-2721

DUCKWORKS BOAT BUILDERS SUPPLY



- plans
- hardware
- custom sails
- epoxy/supplies
- sailmaking supplies
- tools and MORE

low prices, fast service

www.duckworksbbs.com



MERTON'S FIBERGLASS AND MARINE SUPPLY

- Complete hand lay-up fiberglass supplies for light & heavy fiberglass or wood boat repair & construction
- Polyester, Epoxy, Vinylester Marine Grade Resins
- Marine Topside Enamels & Antifouling Bottom Paint
- Silicon Bronze & Stainless Steel Fasteners

Quality Brand Name Products

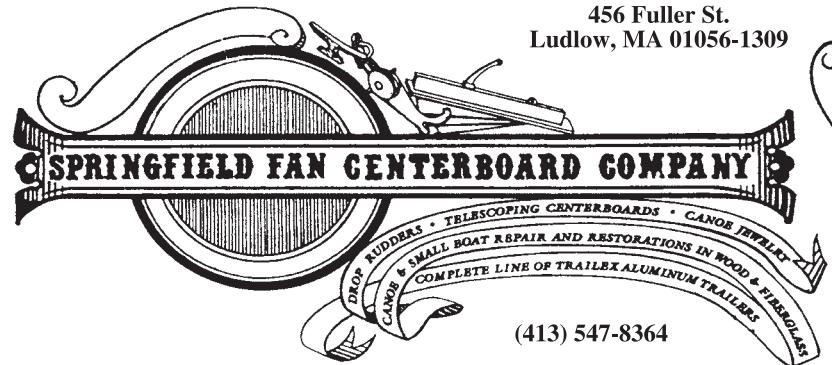
Competitive Pricing
All items in stock for immediate shipment

Online catalog
www.mertons.com
call 800-333-0314
P.O. Box 399
East Longmeadow,
MA 01028

*Supplying Quality Products
To Boat Owners,
Hull Finishers & Boatyards
for over 20 years.*

800-333-0314

456 Fuller St.
Ludlow, MA 01056-1309



Ash, cherry, or oak cleats,
hand-rubbed finish,
several styles available at
WoodMarineCleats.com
or call 906-644-7610
for custom work

Drawing and Notecards of Your Boat

A pencil drawing of
your boat, suitable for
framing, and 50
notecards with the
drawing. Makes a
great gift! ~\$150



See web page: www.baldwinstudio.us

MAINE COAST LUMBER, INC.

17 White Birch Lane
York, ME 03909
(207) 363-7426
(800) 899-1664
Fax (207) 363-8650
M-F 7am-5pm



4 Warren Ave.
Westbrook, ME 04092
(207) 856-6015
(877) 408-4751
Fax (207) 856-6971
M-F 7:30am-4:30pm

HARDWOOD LUMBER • SOFTWOOD LUMBER •
HARDWOOD PLYWOODS • MELAMINE • MDF •
MARINE PLYWOODS • MDO • PARTICLE BOARD •
SLATWALL • LAMINATE • EDGE BANDING • VENEER •
HARDWOOD MOLDINGS • CUSTOM MILLING

We Deliver
ME, NH, VT, MA, RI www.mainecoastlumber.com
email: info@mainecoastlumber.com



RAKA EPOXY & FIBERGLASS

We have several types of epoxy resins with different mix ratios for coating, gluing, and composite construction. Our large fiberglass inventory includes many weights of standard woven materials as well as a good selection of biaxials and triaxials. Carbon and kevlar fabrics are also available. We offer the lowest prices and same day UPS shipping. Our normal store hours are from 9am to 5pm Monday to Friday. Write or call us or see our internet site for complete info and prices.

RAKA Marine

3490 Oleander Ave., Ft. Pierce, FL 34982-6571
Ph. (772) 489-4070 — Fax (772) 461-2070
www.raka.com

Small-Craft & Cruising Sails

Bermudan, gaff, gunter, lug, sprit, etc.
for skiffs or schooners

Aerodynamic designs in
cream, tanbark, white

Photos, quotes at
www.dabblersails.com

email: dabblersails@gmail.com
ph/fax 804-580-8723
or write us at PO Box 234
Wicomico Church, VA 22579



Stuart K. Hopkins, sole prop

CLASSIFIED MARKETPLACE

BOATS FOR SALE



'56 Chris Craft Capri, all original except for a 5200 bottom and new upholstery. All hardware re-chromed. W/custom trlr. Boat located at Antique Boat America, Clayton, NY. Call for more info. ART KORBEL, Coral Springs, FL, (954) 753-7621. (4)

'55 Lyman 15' Runabout w/25hp Johnson. Asking \$4,500. JIM CROWELL, Kingston, MA, (781) 585-2475, &(781) 217-4651. (4)

21' Zephyr, Phil Bolger design, 5' long bow section hinges back on itself so that it easily fits on its trlr in a home garage. All ss fittings. Oars, lee-board, rudder, mast & boom incl (for lateen rig, single sail). Epoxy coated, glassed bottom. Trlr is all-aluminum w/13" wheels (tire OD 24"). Asking \$485 for boat, \$900 for trlr. Both registered in FL. HARRY SCHROETER, (941) 355-8463, harryschoeter@gmail.com (4)



CLASSIFIED ADVERTISING INFORMATION

Classified ads are FREE TO SUBSCRIBERS for personally owned boat related items. Each ad will automatically appear in two consecutive issues. Further publication of any ad may be had on request.

A one-time charge of \$8 will be made for any photograph included with any ad. For return of photo following publication, include a self-addressed stamped envelope.

Non-subscribers and commercial businesses may purchase classified ads at 25¢ per word per issue. To assure accuracy, please type or print your ad copy clearly.

Mail to Boats, 29 Burley St, Wenham, MA 01984, or e-mail to maib.office@gmail.com. No telephone ads please.



18' Mahogany Penn Yan Guide Canoe, '30s vintage. Canvas & wood in gd shape. \$600. ROBERT HAWKES, (585) 278-6911, 3hawkes@bluefrog.com (3)

'67 Tartan 27 Yawl, fg sailboat fully equipped. \$5,000obo or trade for Alberg Typhoon. KEVIN CONDON, Swampscott, MA, (781) 718-8114. (3)

BOATS WANTED

Alberg Typhoon

W.K. CONDON, 39 Puritan Rd., Swampscott, MA 01907, (781) 8114. (3)

GEAR FOR SALE

Antique Engines: 1928 1-cyl, 1hp Briggs & Stratton cast iron tractor engine, belt drive, good shape, no spark, w/book. \$50. 1-cyl, 5hp, 4-cycle Kermath Sea Pup for parts or overhaul. Block okay, no starter or generator. \$100.

JOHN T. O'DONNELL, Milton, MA, (617) 698-1280. (3)



19' Ohio Sharpie Vika, my first build, solid, vy stable, no leaks, easy to maintain (no varnishing, just oil), no fancy joinery. W/aluminum Trailex trlr, sails & sculling oar (which I haven't mastered). \$2,500.

STEVE BROOKMAN, steve@otterwater.com (4)



PENOBCOT 13 AVAILABLE FOR SPRING LAUNCHING

Little Sister to the Well-known Penobscot 14
A Great Boat to Row or Sail
Glued Lapstrake, Okoume Planking

ARCH DAVIS DESIGN

(207) 930-9873

archdavis@myfairpoint.net

There is nothing—absolutely nothing—

half so much worth doing—



as simply messin' about in boats.

Famous Quotation & Illustration from The Wind in the Willows

Join us in expressing Ratty's sentiment to the world. Tee Shirts, Long Sleeve Tees, Sweatshirts, and Tote Bags. Order on-line or by mail. Visit www.messingabout.com for more info or to print an order form.

THE DESIGN WORKS, 9101 Eton Rd, Silver Spring, MD 20901 (301) 589-9391 (voice mail only)

GEAR WANTED

Drop-In Sliding Seat Rowing Unit, I am building an Annapolis wherry tack & tape kit from CLC. This 18' open water rowing boat needs a drop-in sliding seat rowing unit. The Piantedosi unit sells for \$565 new. I am looking for something used and much, much less expensive. I also need a pair of sculling oars about 9' in length. EDWARD MCGUIRE, edmcguire1964@gmail.com (3)

BOOKS AND PLANS FOR SALE

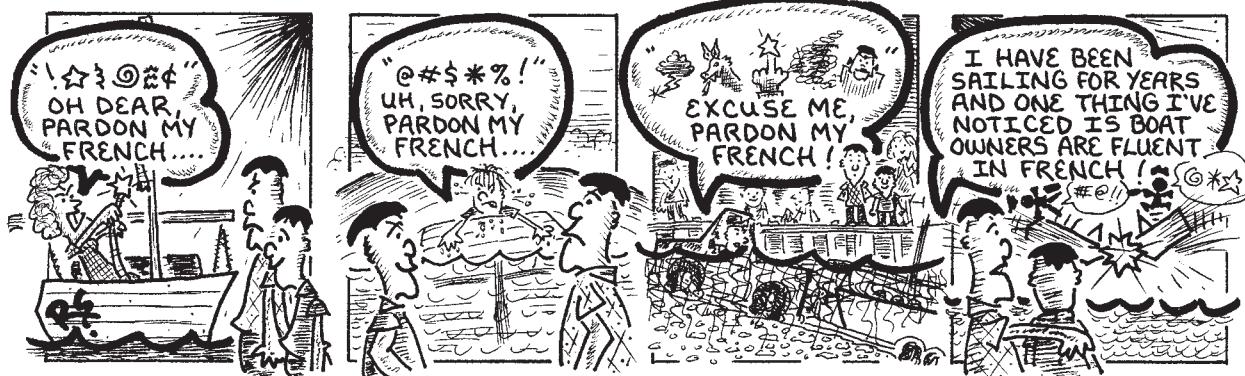
IMAGINE THE PRIDE YOU'LL FEEL on the water in a boat built with your own two hands. Send \$9.95 for Book of Boat Designs describing 300 boats you can build.

GLEN-L, 9152 Rosecrans Ave, Bellflower, CA 90706, (888) 700-5007, www.Glen-L.com/MA (online catalog) (2)

Shiver Me Timbers

By: Robert L. Summers

Sailors!



messing about in **BOATS**

29 BURLEY ST., WENHAM, MA 01984 (978) 774-0906

POSTMASTER: CHANGE SERVICE REQUESTED

315

PRSRT STD
US POSTAGE PAID
PLATTSBURGH, NY 12901
PERMIT #148



Free Catalog & DVD

www.adirondack-guide-boat.com
guideboat@together.net

(802) 425-3926
6821 Rt 7, N Ferrisburgh VT 05473

Many years ago, when we first encountered Darren Bush, the owner of Rutabaga and host of Canoecopia, we concluded a rather intricate deal with him and shook hands. He said, "It's so nice, doing business with a hand-shake and knowing it's rock-solid."

It's been many years since then, the ownership of his company has changed; the ownership of our company has changed, but nothing has changed.



This year:
Canoepedia
March 13-15
Madison, Wisc.



Darren Bush in his natural environment, that is, on the water.

Canoecopia on game-day. Nowhere can you find more boating-related things, except perhaps when the 7th Fleet puts to sea. This photo shows perhaps 20% of the entire show.



As you can see from the photo to the left, we always travel heavy to this show; and always return light. There are 15 boats in this photo, the Suburban itself is carrying 4. (This was done by trained professionals, don't try this at home.) You folks between Vermont and Wisconsin, order early, free delivery along our route.

As of now this looks as if it will be our only visit to the Mid-west this year. Building the boats fast enough is more our problem, not selling them.